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17	INC. and SAMSUNG TELECOMMUNICATIONS AMERICA, LLC	
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19	UNITED STATES	DISTRICT COURT
20	NORTHERN DISTRICT OF CAI	LIFORNIA, SAN JOSE DIVISION
21	APPLE INC., a California corporation,	CASE NO. 12-CV-00630-LHK
22	Plaintiff,	
23	VS.	SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES
24	SAMSUNG ELECTRONICS CO., LTD., a	
25	Korean business entity; SAMSUNG ELECTRONICS AMERICA, INC., a New	
26	York corporation; SAMSUNG TELECOMMUNICATIONS AMERICA,	
27	LLC, a Delaware limited liability company,	
	Defendants.	
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Pursuant to the Court's Minute Order and Case Management Order, and Patent Local Rules 3-3 and 3-4, Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC (collectively, "Samsung") submit invalidity contentions and document productions for U.S. Patent Numbers 5,666,502 ("the '502 Patent"); 5,946,647 ("the '647 patent"); 6,847,959 ("the '959 patent"); 7,761,414 ("the '414 patent); 8,014,760 ("the '760 patent); 8,046,721 ("the '721 patent"); 8,074,172 ("the '172 patent"); and 8,086,604 ("the '604 patent") (collectively, "Apple Asserted Patents"). Apple Inc. is referred to herein as "Apple" or "Plaintiff."

#### PATENT LOCAL RULE 3-3 DISCLOSURES

- 1. This disclosure is directed to preliminary invalidity and unenforceability issues only and does not address claim construction or non-infringement. Samsung reserves all rights with respect to such issues, including but not limited to its position that claims of the Apple Asserted Patents are to be construed in a particular manner and are not infringed.
- 2. These invalidity contentions are preliminary and are based on Samsung's current knowledge, understanding, and belief as to the facts and information available as of the date of these contentions. Samsung has not yet completed its investigation, discovery, or analysis of information related to this action, and additional discovery may require Samsung to supplement or amend its invalidity contentions. While Samsung has made a good-faith effort to provide a comprehensive list of prior art relevant to this case, Samsung reserves the right to modify or supplement its prior art list and invalidity contentions at a later time with or based upon pertinent information that may be subsequently discovered from Apple or third-parties. Moreover, discovery is ongoing and Samsung reserves the right to pursue all other defenses that may be available to it, including but not limited to defenses that the Apple Asserted Patents are unenforceable based on laches, estoppel, waiver acquiescence, inequitable conduct, patent misuse, patent exhaustion, express or implied license, or any other grounds.
- 3. Any invalidity analysis depends, ultimately, upon claim construction, which is a question of law reserved for the Court. The asserted claims have not yet been construed by the Court in this case and, thus, Samsung has not yet had the opportunity to compare the asserted

claims of the Apple Asserted Patents (as construed by the Court) with the prior art. Samsung reserves the right to amend, supplement, or materially modify its invalidity contentions after the claims have been construed by the Court. Samsung also reserves the right to amend, supplement, or materially modify its invalidity contentions based on any claim construction positions that Apple may take in this case. Samsung also reserves the right to assert that a claim is indefinite, not enabled, or fails to meet the written description requirement based on any claim construction position Plaintiff may take in this case or based on any claim construction the Court may adopt in this case.

- 4. Samsung's invalidity contentions are directed to the claims asserted by Plaintiff that are identified in Plaintiff's June 15, 2012 Disclosure of Asserted Claims and Infringement Contentions. In its Infringement Contentions, however, Plaintiff states that it "reserves the right to supplement or amend these disclosures as further facts are revealed during the course of this litigation." Samsung therefore reserves the right to modify, amend, supplement or otherwise alter its invalidity contentions in the event that Plaintiff supplements or amends its infringement contentions or takes a claim construction position that is different than or in addition to those set forth in its infringement contentions, or for any other reason constituting good cause to modify, amend, supplement or otherwise alter these invalidity contentions.
- 5. Samsung further contends that Plaintiff appears to be pursuing overly broad constructions of the asserted claims of the Apple Asserted Patents in an effort to piece together an infringement claim where none exists and to accuse products that do not practice the claims as properly construed. At the same time, Plaintiff's infringement contentions are in many places too general and vague to discern exactly how Plaintiff contends each accused product practices each element of the asserted claims. These invalidity contentions are not intended to be, and are not, an admission that the asserted claims are infringed by any of Samsung's products or technology, that any particular feature or aspect of any of the accused products practices any elements of the asserted claims, or that any of Plaintiff's apparent constructions are supportable or proper. To the extent that any of the prior art discloses the same functionality or feature of any of the accused products, Samsung reserves the right to argue that said feature or functionality does not practice

any element of any of the asserted claims, and to argue, in the alternative, that if said feature or functionality is found to practice any element of any of the asserted claims of the Apple Asserted Patents, then the prior art reference demonstrates that that element is not novel to the invention and that the claim is not patentable.

- 6. Attached hereto as Exhibits A through H are representative claim charts that demonstrate how the asserted claims of the Apple Asserted Patents are invalid in view of certain prior art. The references cited in Exhibits A through H may disclose the limitations of the asserted claims of the Apple Asserted Patents either expressly and/or inherently. Moreover, the suggested obviousness combinations are in the alternative to Samsung's anticipation contentions. The obviousness combinations set forth in these contentions should not be construed to suggest that any reference included in any combination is not anticipatory in its own right.
- 7. In this action, Plaintiff asserts that Samsung infringes certain claims of the Apple Asserted Patents. Although Plaintiff asserts that these claims are either literally infringed or infringed under the doctrine of equivalents, Plaintiff has failed to provide any analysis or explanation regarding alleged infringement of the asserted claims of the patents-in-suit under the doctrine of equivalents. Samsung reserves its rights to modify, amend, supplement or otherwise alter its preliminary infringement contentions in the event Plaintiff is permitted to modify, amend, supplement, or clarify their infringement contentions with respect to direct infringement (literal and under the doctrine of equivalents).
- 8. Samsung is providing invalidity contentions only for the claims asserted by Plaintiff, but hereby reserves the right to seek invalidation of all claims in each of the Apple Asserted Patents.
- 9. Samsung reserves the right to modify, amend, or supplement these disclosures as additional information becomes available, and as its discovery and investigation proceed.

#### I. THE '502 PATENT

# A. Local Patent Rule 3-3(a): Identification of Prior Art<sup>1</sup>

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '502 Patent:

#### 1. Patent References<sup>2</sup>

Country of Origin	Patent Number	Date of Issue	Priority Date
US	4,330,845	May 18, 1982	Dec. 31, 1979
US	4,559,598	Dec. 17, 1985	Feb. 22, 1983
US	4,737,980	Apr. 12, 1988	July 19, 1985
US	4,862,498	Aug. 29, 1989	Nov. 28, 1986
US	4,896,291	Jan. 23, 1990	May 20, 1988
US	5,007,019	Apr. 9, 1991	Jan. 5, 1989
US	5,041,967	Aug. 20, 1991	Oct. 13, 1987
US	5,103,498	Apr. 7, 1992	Aug. 2, 1990
US	5,265,014	Nov. 23, 1993	Apr. 10, 1990
US	5,317,646	May 31, 1994	Mar. 24, 1992
US	5,357,431	Oct. 18, 1994	Jan. 25, 1993
US	5,386,298	Jan. 31, 1995	Apr. 26, 1993
US	5,396,419	Mar. 7, 1995	Sep. 8, 1992
US	5,455,901	Oct. 3, 1995	Sep. 12, 1994
US	5,459,488	Oct. 17, 1995	Jan. 19, 1993
US	5,479,536	Dec. 26, 1995	Nov. 27, 1991
US	5,495,565	Feb. 27, 1996	June 21, 1994
US	5,513,308	Apr. 30, 1996	Sep. 1, 1993
US	5,537,618	July 16, 1996	Dec. 23, 1993
US	5,555,496	Sep. 10, 1996	May 6, 1994
US	5,557,515	Sep. 17, 1996	Aug. 11, 1989
US	5,574,482	Nov. 12, 1996	May 17, 1994
US	5,608,898	Mar. 4, 1997	Nov. 12, 1992
US	5,619,708	Apr. 8, 1997	Oct. 25, 1994
US	5,623,681	Apr. 22, 1997	Nov. 19, 1993
US	5,632,022	May 20, 1997	Nov. 13, 1991
US	5,644,735	July 1, 1997	May 27, 1992
US	5,675,362	Oct. 7, 1997	Nov. 14, 1988
US	5,682,510	Oct. 28, 1997	Mar. 30, 1995
US	5,682,538	Oct. 28, 1997	Aug. 12, 1994
US	5,704,029	Dec. 30, 1997	May 23, 1994
US	5,724,449	Mar. 3, 1998	Nov. 27, 1991
US	5,748,512	May 5, 1998	Feb. 28, 1995

<sup>&</sup>lt;sup>1</sup> To the extent one or more prior art patents, publications, or systems are identified in the claim charts attached as Exhibits A-H to this document, but are not included in the tables and lists below for each patent, those prior art patents, publications, or systems should also be considered as prior art to the asserted patents.

<sup>&</sup>lt;sup>2</sup> Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

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Country of Origin	Patent Number	Date of Issue	Priority Date
US	5,752,054	May 12, 1998	June 6, 1995
US	5,799,107	Aug. 25, 1998	Oct. 15, 1997
US	5,805,676	Sep. 8, 1998	May 19, 1995
US	5,818,437	Oct. 6, 1998	July 26, 1995
US	5,835,635	Nov. 10, 1998	June 27, 1995
US	6,008,799	Dec. 28, 1999	May 24, 1994
US	6,018,342	Jan. 25, 2000	July 3, 1995
US	7,136,710	Nov. 14, 2006	Dec. 23, 1991

#### **Publications**<sup>3</sup> 2.

Title	Date of Publication	Author	Publisher
A Modular and Flexible Architecture for an Integrated Corpus Query System	July 1994	Oliver Christ	Cornell University
A Pen-Based Database Interface for Mobile Computers	1994	Rafael Alonso and V.S. Mani	Institute of Electrical and Electronics Engineers
Adaptive and Predictive Techniques in a Communication Prosthesis	1987	Andrew L. Swiffin, John L. Arnott, J. Adrian Pickering, and Alan F. Newell	Informa Healthcare
Adaptive predictive text generation and the reactive keyboard	1989	John Darragh, John Joseph	University of Calgary
A Stylus-Based User Interface for Text: Entry and Editing	June 1991	Aaron Goodisman	Massachusetts Institute of Technology
Adaptive predictive text generation and the reactive keyboard	1991	John J. Darragh and Ian H. Witten	Elsevier
Context and Orientation in Hypermedia Networks	1989	Kenneth Utting and Nicole Yankelovich	Association for Computing Machinery
Designing the User Interface	1992	Ben Schneiderman	Addison- Wesley
Enhancing the Usability of an Office Information System Through Direct Manipulation	Dec. 1983	Alison Lee and F.H. Lochovsky	Association for Computing Machinery
Facilitating the Development of Representations in Hypertext with IDE	Nov. 1989	Daniel S. Jordan, Daniel M. Russell, Anne-Marie S.	Association for Computing Machinery

Samsung incorporates by reference all prior art references identified in the publications listed herein.

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Title	Date of Publication	Author	Publisher
		Jensen, and Russell A. Rogers	
IBM Simon User's Manual	1994		IBM
Investigations into History Tools for User Support	Apr. 1992	Alison Lee	University of Toronto
Marquise: Creating Complete User Interfaces by Demonstration	Apr. 1993	Brad A. Myers, Richard G. McDaniel, and David S. Kosbie	Association for Computing Machinery
Microsoft Foundation Class Primer	1993	Jim Conger	Waite Group Press
Pen Computing: A Technology Overview and a Vision	July 1995	Andre Meyer	Association for Computing Machinery
Predictive interfaces: What will they think of next?	Nov. 1991	Saul Greenberg, John Darragh, David Maulsby, and Ian H. Witten	University of Calgary
Predictive interfaces: What will they think of next?	1995	Saul Greenberg, John Darragh, David Maulsby, and Ian H. Witten	Association for Computing Machinery
Reducing Keystroke Counts with a Predictive Computer Interface	1982	Ian H. Witten, John G. Cleary, John J. Darragh, and David R. Hill	Institute of Electrical and Electronics Engineers
Software Interface for the Touch-Sensitive Menu of the Technician's Assister System	Dec. 20, 1990	Joseph A. Molnar and Sonia Faletti	Defense Technical Information Center
Split Menus: Effectively Using Selection Frequency to Organize Menus	Mar. 1994	Andrew Sears and Ben Schneiderman	Association for Computing Machinery
Supporting command reuse: empirical foundations and principles	Feb. 1993	Saul Greenberg and Ian H. Witten	Academic Press
Supporting Command Reuse: Mechanisms for Reuse	Feb. 1993	Saul Greenberg and Ian H. Witten	Academic Press
The Computer User as Toolsmith: The Use, Reuse, and Organization of Computer-based Tools	1993	Saul Greenberg	Cambridge University Press
The Design of a Graphical Browsing Interface for a Hypertext System	Feb. 25, 1994	Joslyn A.A. Smith	University of New Brunswick
The Human Factors of Graphic Interaction: Tasks	Dec. 1980	James D. Foley and Peggy Chan	Defense Technical

Title	Date of Publication	Author	Publisher
and Techniques			Information Center
The Information Grid: A Framework for Information Retrieval and Retrieval- Centered Applications	Nov. 1992	Ramana Rao, Stuart K. Card, Herbert D. Jellinek, Jock D. Mackinlay, and George G. Robertson	Association for Computing Machinery
The XKWIC User Manual	Aug. 2, 1995	Oliver Christ	Institut für maschinelle Sprachverarbeit ung, Universität Stuttgart
Tools for Supporting the Collaborative Process	Nov. 1992	James R. Rhyne and Catherine G. Wolf	Association for Computing Machinery
Touch-sensitive screens: the technologies and their application	1986	J.A. Pickering	Elsevier
User modeling in interactive computer systems	1984	Saul Greenberg and Ian H. Witten	University of Calgary
Using a touchscreen for simple tasks	1990	John D. Gould, Sharon L. Greene, Stephen J. Boies, Antonia Meluson and Manvan Rasamny	IBM T.J. Watson Research Center
Using Graphic History in Browsing the World Wide Web	May 1995	Eric Z. Ayers and John T. Stasko	Georgia Institute of Technology

# 3. **Systems**

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '502 Patent, including documents and source code describing the same:

# • Windows 95 Preview Program Builds

Samsung reserves the right to amend these invalidity contentions to assert these references depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other

references to render the claims of the '502 Patent obvious in the event Apple takes the position that certain claim limitations are missing from the references charted in Exhibit A.

#### B. Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders Obvious the Asserted Claims

Plaintiff asserts claims 1-2, 4-5, 8, 11, 13-17, 20, 22-24 and 26 of the '502 Patent against Samsung in this lawsuit. All of those claims are invalid because the '502 Patent fails to meet one or more of the requirements for patentability. The individual bases for invalidity are provided below and in the claim charts attached as Exhibit A. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '502 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit A, which identify specific examples of where each limitation of the asserted

claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit A, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '502 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit A, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '502 Patent to combine the various references cited herein so as to practice the asserted claims of the '502 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or the nature of the problems allegedly addressed by the '502 Patent. Combining the references

disclosed in Exhibit A would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits A-1 to A-6, which includes exemplary claim charts for the asserted claims of the '502 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims. Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff, information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

# C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function is attached in Exhibits A-1 to A-6.

#### D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '502 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

## 1. Invalidity Based on 35 U.S.C. § 101

The asserted claims of the '502 Patent are invalid under 35 U.S.C. § 101 because they only claim abstract ideas. Many limitations in the asserted claims are common abstractions in computer systems and programming languages. For example, "a list of choices is produced", "stores historical information", "the select choice is input into said computer system and displayed", "determining whether the user has selected an item", "assigning a data value", "determining whether the data value already exists", "adding the data value", "data values within the history table correspond directly or indirectly or input values", "updating the usage information" each refer only to programming abstractions or the manipulation of information; these are concepts, not physical objects or tangible matter.

# 2. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '502 Patent is invalid in that the '502 specification fails to particularly point out and distinctly claim the alleged invention of the '502 Patent. Samsung further asserts that each asserted claim of the '502 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and

which it pertains, or with which it is most nearly connected, to make and use the alleged invention. Based on Samsung's present understanding of Plaintiff's infringement contentions, Samsung asserts that claims 1, 2, 5, 8, 11, 15-17, 20, 23-24, 26 of the '502 Patent are invalid for "field of a form" / "field of the form" / "a form having at least one field" / "a form" "a list of choices is produced from said history table" "historical information concerning usage of data values" / "usage information" "history table for the field class corresponding to the field is updated" / "updating the history list" / "updating the history table" / "updating the usage information corresponding to the data value to reflect its recent usage" "field class corresponding to the field" / "the field being associated with one of the "selecting the history list for the field based on the field class associated with the "determining whether the user has selected an item from the displayed history list" / "assigning a data value for the field to that of a data value associated with the "identifying the history table for the field class associated with the field" These claim terms/phrases as apparently construed by Apple violate the written description, enablement, and/or definiteness requirements of 35 U.S.C. § 112. Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention

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would not understand what is claimed, even when the claims are read in light of the specification. Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear lack written description because the specification of the '502 Patent demonstrates that the patentee neither conceived of nor demonstrated possession of all that Apple now contends the claims cover.

Samsung further asserts that claim 26 is invalid for reciting at least the following claim terms/phrases:

- "computer readable code devices for displaying . . ."
- "computer readable code devices for determining . . ."
- "computer readable code devices for assigning . . ."
- "computer readable code devices for updating . . ."

Each of these claims is governed by 35 U.S.C. § 112, paragraph 6. The '502 patent specification, however, fails to set forth the structure, material or acts for accomplishing the claimed computer readable code devices. Each of these claims is therefore invalid as indefinite under 35 U.S.C. § 112(2).

In addition, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear are invalid because the specification fails to provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains, or with which it is most nearly connected, to implement the invention without undue experimentation.

For at least the reasons set forth above, the claims fail to satisfy the requirements of  $\S 112$   $\P 1$  and 2.

#### II. THE '647 PATENT

#### A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '647 Patent:

# 1. **Patent References**<sup>4</sup>

Country of Origin	Patent Number	Date of Issue	Priority Date
JP	H6-342426	Dec. 13, 1994	May 31, 1993
JP	H2-184155	July 18, 1990	Jan. 11, 1989
JP	H2-158875	June 19, 1990	Dec. 13, 1988
KP	1995-	Sep. 15, 1994	Feb 1, 1993
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EP	0 458 563	May 20, 1991	May 21, 1990
EP	369013A1	Feb. 15, 1995	Jul. 31, 1987
EP	458563A2	Nov. 27, 1991	May 21, 1990
EP	635808A2	Jan. 25, 1995	Jul., 21, 1993
USA	4,227,245	Oct. 7, 1980	Jun. 1, 1972
USA	4,818,131	Apr. 4, 1989	Dec. 29, 1985
JP	5027962A	Feb. 5, 1993	July 22, 1991
USA	5,101,424	Mar. 31, 1193	Sep. 8, 1990
USA	5,212,792	May 18, 1993	June 1, 1989
USA	5,261,042	Nov. 9, 1993	Nov. 20, 1989
USA	5,301,350	Apr. 5, 1994	Oct. 10, 1989
USA	5,359,317	Oct. 25, 1994	Oct. 9, 1992
USA	5,369,778	Nov. 29, 1994	Aug. 21, 1987
USA	5,375,200	Dec. 20, 1994	Nov. 13, 1992
USA	5,375,201	Dec. 20, 1994	Dec. 18, 1992
USA	5,398,336	Mar. 14, 1995	Oct. 16, 1990
USA	5,418,717	May 23, 1995	Aug. 27, 1990
USA	5,437,036	Jul. 25, 1995	Sep. 3, 1992
USA	5,463,772	Oct. 31, 1995	Apr. 23, 1993
USA	5,483,352	Jan. 9, 1996	Aug. 27, 1992
USA	5,572,643	Nov. 5, 1996	Oct. 19, 1995
USA	5,604,897	Feb. 18, 1997	May 18, 1990
USA	5,606,712	Feb. 25, 1997	July 19, 1993
USA	5,634,124	May 27, 1997	Aug. 21, 1987
USA	5,649,222	Jul. 15, 1997	May 8, 1995
USA	5,671,427	Sep. 23, 1997	Oct. 12, 1994
USA	5,737,734	Apr. 7, 1998	Sep. 15, 1995
USA	5,774,729	June 30, 1998	Dec. 19, 1991
USA	5,787,432	Jul. 28, 1998	Dec. 6, 1990
USA	5,790,793	Aug. 4, 1998	Apr. 4, 1995
USA	5,799,268	Aug. 25, 1998	Sep. 28, 1994
USA	5,859,636	Jan. 12, 1995	Dec. 27, 1995
USA	5,905,890	May 18,1999	Oct. 27, 1993
USA	5,995,106	Nov. 30, 1999	May 24, 1993
USA	6,115,710	Sep. 5, 2000	Sep. 28, 1989
USA	6,259,446	July 10, 2001	Dec. 23, 1992
USA	6,678,706	Jan. 13, 2004	Apr. 18, 1991
USA	7,006,881	Feb. 28, 2006	Dec. 23, 1991

<sup>&</sup>lt;sup>4</sup> Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

# 2. **Publications**<sup>5</sup>

Title	Date of	Author	Publisher
Title	Publication Publication	Author	1 ublisher
A Fast Algorithm for Multi- Pattern Searching	May 1994	Sun Wu	N/A
A Methodology for the Automatic Construction of a Hypertext for Information Retrieval.	1993	Maristella Agosti; Fabio Crestani	N/A
A Relaxation Method for Understanding Speech Utterances.	1992	Stephanie Seneff	N/A
A System For Discovering Relationships by Feature Extraction from Text Databases	Aug 1994	Jack G. Conrad and Mary Hunter Utt	N/A
A Taxonomy of See-Through Tools.	Apr. 24-28, 1994	Eric A. Bier; Maureen C. Stone; Ken Fishkin; William Buxton; Thomas Baudel	N/A
A Template Matcher for Robust NL Interpretation.	1991	Eric Jackson; Douglas Appelt; John Bear; Robert Moore; Ann Podlozny	N/A
Actions (scripts) - Actions are AppleScript scripts which perform tasks using the detected text.	1997	Apple Computer	N/A
Actions (scripts) - Tips and Tricks	1997	Apple Computer	N/A
Actions (scripts) - Writing AppleScript Actions for Detectors	1997	Apple Computer	N/A
Actions (scripts) - Writing AppleScript Actions for Detectors (extracting the detected text)	1997	Apple Computer	N/A
Actions (scripts) - Writing AppleScript Actions for Detectors (Running the Script)	1997	Apple Computer	N/A
Actions (scripts) - Writing AppleScript Actions for Detectors (Script Body)	1997	Apple Computer	N/A
Actions (scripts) - Writing AppleScript Actions for Detectors (USCityState Detector)	1997	Apple Computer	N/A
Agents of Alienation.	Jul. 1995	Jaron Lanier	N/A

<sup>&</sup>lt;sup>5</sup> Samsung incorporates by reference all prior art references identified in the publications listed herein.

1	Title	Date of Publication	Author	Pu
2	Agents that Reduce work and	Jul. 1994	Patti Maes	N/A
3	Information Overload. An Efficient Context-Free Parsing Algorithm.	Apr. 1969	Jay Earley	N/A
4	An Open Agent Architecture.	1994	Philip R. Cohen;	N/A
5 6			Adam Cheyer; Michelle Wang; Soon Cheol Baeg	
7	Anaphora in a Wider Context: Tracking Discourse Referents.	1996	Christopher Kennedy; Branimir	N/A
9	Apple Developer CD Series	Including but not limited to Nov. 1992,	Apple Developer Group	N/A
10 11		Dec. 1993, Mar. 1994,	Croup	
12		Jun. 1994, Sep. 1994,		
13		Dec. 1994, Jun. 1995, Aug. 1995,		
14		Sep. 1995, Nov. 1995,		
15		Dec. 1995, Feb. 1996,		
16		Mar. 1996, Jun. 1996,		
17		Aug. 1996, and Nov. 1996		
18	Apple Human Interface Guidelines	1992		N/A
19 20	Apple Newton – Backing up pre-installed software packages using a storage card	1995	N/A	N/A
21	Apple Newton – Features of the Newton 2.0 Operating System	Undated	N/A	N/A
22	Apple Newton – Flow Charts	Undated	N/A	N/A
23	Apple Newton – Hardware Guide	Undated	Joe Tate	N/A
24	Apple Newton – Internal Serial Slot Designer's Guide	Undated	N/A	N/A
25	Apple Newton – Message Pad Accessories	Undated	N/A	N/A
26	Apple Newton – Message Pad Handbook	1995	N/A	N/A
27	Apple Newton – Message Pad Specifications	Undated	N/A	N/A
28	Apple Newton – Programmer's Guide	Undated	Don Mills	N/A
- 1	I .			

Publisher

1	Title	Date of Publication	Author	Publisher
2	Apple Newton – Programmer's Reference	Undated	N/A	N/A
3	Apple Newton – ROM Board Designer's Guide	Undated	N/A	N/A
5	Apple Newton – Solutions Guide vol. 1 & 2	1995	David Nagel	N/A
6	Apple Newton – System Update 1.3	1995	N/A	N/A
7	Applescript – The Easy Way is the Right Way	1998	Apple Computer, Inc.	N/A
8	At Macworld, Apple failed to regain believers among the once faithful	Jan. 13, 1997	Denise Caruso	N/A
9	Automatic Authoring and Construction of Hypermedia for Information Retrieval.	Feb. 1995	Maristella Agosti; Massimo Melucci; Fabio	N/A
11	Automatic Hypertext Construction.	Jan. 1995	Crestani James Allan	N/A
12 13 14	Automatic Structuring and Retrieval of Large Text Files	Feb. 1994	Gerard Salton, James Allan, and Chris Buckley	Association for Computing Machinery
15 16	Automatic Text Processing: The Transformation, Analysis, and Retrieval of Information by Computer	1989	Gerard Salton	N/A
17 18	Automatic Text Structuring and Retrieval – Experiments in Automatic Encyclopedia Searching.	1991	Gerard Salton; Chris Buckley	N/A
19	Byte cover story entitled "The Point of the Pen"	Feb. 1991	Robert Carr	McGraw-Hill
20	Cambridge Journals, "National Language Engineering"	Mar. 1995	N/A	N/A
21	Collaborative Programmable Intelligent Agents.	1998	Bonnie A. Nardi; James R. Miller; David J.	N/A
22	Complete Guide to the NextStep	1993	Wright Michael B.	N/A
23	User Environment. Connecting – With Your EO	1992	Shebanek Ann Cullen	EO Publications
<ul><li>24</li><li>25</li></ul>	Cellular Module Converting a Textbook to Hypertext	July 1992	Roy Rada	Association for Computing Machinery
<ul><li>26</li><li>27</li></ul>	Creating Highly-Interactive and Graphical User Interfaces by Demonstration.	Aug. 1986	Brad A. Myers; William Buxton	N/A
28	Creating User Interfaces Using Programming by Example,	Apr. 1990	Brad A. Myers	N/A

-18- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

1	Title	Date of Publication	Author	Publisher
2	Visual Programming, and Constraints.			
3	Currency Detectors	1997	Apple Computer	N/A
4 5	CyberDesk: A Framework for Providing Self-Integrating Context-Aware Services.	1998	Anind K. Dey; Gregory D. Abowd Andrew	N/A
	Data Detectors – summary	1997	Wood Apple Computer	N/A
6 7	Demonstrational Techniques for Instructible Interface Agents.	Mar. 1994	Henry Lieberman	N/A
	Detectors - definition	1997	Apple Computer	N/A
8	Developing Adaptive Systems To Fit Individual Aptitudes.	1992	David Benyon; Dianne Murray	N/A
9	Developing for the User	May 19, 1988	Robert Carr	M&T Publishing
10	"Dexter With Open Eyes,"	February 1994	John L. Leggett and John L.	Communication s of the
11			Schnase	Association for Computing Machinery,
12 13	Documents as User Interfaces.	1991	Eric A. Bier; Ken Pier	N/A
14	Downloading the Apple Data Detectors SDK for developers.	1997	Apple Computer	N/A
15	Dr. Dobb's Journal Article entitled, "A Conversation with Robert Carr Part II"	Dec. 1991	Michael Swaine	M&T Publishing
16 17	Dr. Dobb's Journal of Software Tools for the Professional Programmer – Avoiding	May 19, 1988	N/A	M&T Publishing
18	Software Pitfalls Dr. Dobb's Journal of Software Tools for the Professional	Nov. 1991	N/A	M&T Publishing
19	Programmer – Operating System Platforms			
20	Drop Zones: An Extension to LiveDoc.	Apr. 1998	Thomas Bonura; James R. Miller	N/A
21	Eager Demonstration Video	1991	Allen Cypher	N/A
22	Eager: Programming Repetitive Tasks By Example.	Apr 28-May 2, 1991	Allen Cypher	N/A
23	Effective Video Screen Displays: Cognitive Style and Cuing Effectiveness	Jan. 1994	Kenneth A. Cory	SIGCHI Bulletin
24 25	Embedded Menus: Selecting Items in Context	1986	Larry Koved; Ben Shneiderman	N/A
26	Embedded Menus: Selecting Items In Context	Apr. 1986	Larry Koved and Ben Schneiderman	Association for Computing Machinery
27	Embedded Menus: Selecting Items in Context, ACM Vol. 29	Apr. 1986	Larry Koved; Ben	N/A
28	No. 4		Schneiderman	

-19- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

1	Title	Date of Publication	Author	Publisher
2 3	EmbeddedButtons: Documents as User Interfaces	Nov. 1991	Eric A. Bier	Association for Computing Machinery
4	Entering the World-Wide Web: A Guide to Cyberspace.	Mar. 1994	Kevin Hughes	N/A
5	Experiments with Oval: A Radically Tailorable Tool for Cooperative Work.	Apr. 1995	Thomas W. Malone; Kum- Yew Lai;	N/A
6			Christopher Fry	
7	Exploring EXPECT: A Tcl-based Toolkit for Automating Interactive Programs.	Dec. 1, 1994	Don Libes	N/A
8	Finding and Reminding File Organization from the Desktop.	Jul. 1995	Deborah Barreau; Bonnie A. Nardi	N/A
10 11	Formal Languages and Their Relation to Automata	1969	John Hopcroft and Jeffrey Ullman	Addison- Wesley
12	Fortune article entitled "Hot New PCs That Read Your Writing"	Feb. 11, 1991	Brenton R. Schlender	The Time Inc Magazine Company
13	From documents to objects: An overview of LiveDoc.	Apr. 1998	Jim Miller; Thomas Bonura	N/A
14 15	FYI, revised draft URL document	Aug. 5, 1994	Tim Berners- Lee, Larry Masinter, Mark	N/A
16	Getting Results with Microsoft	1995	McCahill Microsoft	N/A
17	Office. Getting Started – With Your EO Personal Communicator	1992	Ann Cullen	EO Publications
18	Getting Started with PenPoint [Version 1.0]	1992	N/A	N/A
19 20	GNU Emacs: UNIX Text Editing and Programming.	1992	Michael A. Schoonover; John S. Bowie; William R.	N/A
21	GNU Emacs: goto-addr.el	Aug. 15, 1995	Arnold Eric Ding	N/A
22	GO Corporation – At Last,	1991	N/A	N/A
23   24	Technology Harnesses One of The Most Powerful Forces Known to Man			
_	Go Corporation Business Plan	June 23, 1988	N/A	N/A
25	GO Corporation Current Status & Future Goals	Undated	N/A	N/A
26	Graphical Search and Replace.	Aug. 1988	David Kurlander	N/A
27	Handwritten Notes – Dr. Dobbs - "Designing Apps"	Undated	N/A	N/A
28	Handwritten Notes – Software Development "Tips"	Undated	N/A	N/A

-20- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

1	Title	Date of	Author	Publisher
		Publication		
2	Handwritten Notes – "Key Philosophies of FW"	Undated	N/A	N/A
3	HieNet: A User-Centered Approach for Automatic Link	Nov. 1993	Daniel T. Chang	N/A
4	Generation.	A 1005	NI/A	NT/A
5	http://graphcomp.com/info/spec s/nets/ddeapi.html, April 1995 ("DDE")	Apr. 1995	N/A	N/A
6	Hypertext: Concepts, Systems and Applications.	Nov. 1990	N. Streitz; A. Rizk; J. Andre	N/A
7 8 9	Incorporating String Search in a Hypertext System: User Interface and Signature File Design Issues	1990	Faloutsos, Raymond Lee, Catherine Plaisant and Ben	HyperMedia
	Incremental maintenance of	1990	Shneiderman Simon M.	Butterworth–
10 11	semantic links in dynamically changing hypertext systems	1990	Kaplan and Yoelle S. Maarek	Heinemann
12	Information For Developers" sheet	Undated	N/A	N/A
13 14	Intelligent Agents: What We Learned At The Library.	1996	Bonnie A. Nardi; Vicki O'Day	N/A
15	Interactive Constraint-Based Search And Replace.	May 3-7, 1992	David Kurlander; Steven Feiner	N/A
16	Internet Address Detectors	1997	Apple Computer	N/A
17	Learning Perl	1993	Randall L. Schwartz	O'Reilly & Associates
18	Letter, The Indsiders Guide to The Personal Computer	Jan. 28, 1991	N/A	Industry Publishing
19	Industry, article entitled "Operating Systems GO's Got The Most Modern OS Around"			Company
20	Looking for the Bright Side of User Interface Agents.	Jan. 1995	Ben Schneiderman	N/A
21	Lookup Guide to the EO Personal Communicator	1993	Ann Cullen	EO Publications
22	Lotus Notes Application Development Handbook.	May 1995	Erica Kerwien	N/A
23	The Lynx_users_guide.html file ("Lynx User Guide") entitled	May, 20, 1994	N/A	N/A
24	"Lynx User Guide Version 2.3" Mac OS Discussion Forum –	1998	Apple Computer	N/A
25	Apple Script  Managing Internet Information	1994	Cricket Liu	O'Reilly &
26   27	Services Microsoft Foundation Class	1993	Jim Conger	Associates Waite Group
28	Primer  Multi-media RISSC Informatics Receiving Information with	1986	Daniela Rus; Devika	Press N/A

-21- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

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1	Title	Date of Publication	Author	Publisher
2	Structural Structural Components.		Subramanian	
3	N2 Newton – Overview	Jul. 22, 1996	N/A	N/A
4	N2 Newton – Power Adaptor Designer's Guide	Undated	N/A	N/A
5	N2 Newton – Power System Architecture	Undated	N/A	N/A
6	Newton Programmers Guide	1994		Addison- Wesley
7	Parsing Techniques – a Practical Guide	1990	Dick Grune and Ceriel Jacobs	Ellis Horwood, Chichester
8	PC Magazine article entitled "First Looks, Hands-on Reviews of the Latest Products"	June 30, 1992	Bruce Brown	N/A
9	PC Magazine article entitled	Jan. 14, 1992	Ray Duncan	N/A
10	"Power Programming, An Introduction to Pen-Based Computing"			
12	PC Week article entitled "PenPoint Makes Its Debut with Support from 40 ISVs"	Apr. 20, 1992	Erica Schroeder	N/A
13	PenApps Developer's Release – Software Development Kit	Undated	N/A	N/A
14	PenPoint - A Catalog of Products and Services	1992	N/A	N/A
15	PenPoint 1.01 SDK Installation and Release Notes	Sep. 27, 1992	N/A	N/A
16	PenPoint API Reference Volume I	1990	N/A	Addison- Wesley
17	PenPoint Architectural Reference Volume I	1991	N/A	Addison- Wesley
18	PenPoint Architectural Reference Volume II	1991	N/A	Addison- Wesley
19	PenPoint Development Tools	1991	N/A	Addison- Wesley
20	PenPoint Getting Started	1991	N/A	N/A
21	PenPoint Introduction letter re Software Development Kit	Undated	N/A	N/A
22	PenPoint News Release "GO Announces PenPoint Operating	Jan. 22, 1991	N/A	N/A
23	System For Mobile Pen-based Computing"			
24	PenPoint Notebook User Interface	1991	N/A	N/A
25	Penpoint Programming	1992	Andy Novobilski	Addison- Wesley
26	PenPoint User Interface Design Reference	1991	N/A	Addison- Wesley
27	Perspective Handbook	Nov. 1992	N/A	
27	Pocket Guides – Eleven Basic PenPoint Gestures	1991	N/A	
28	POSIX Programmer's Guide	1994	Donald Lewine	O'Reilly &

-22- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

1	Title	Date of Publication	Author	Publisher
2	Writing Portable UNIX Programs			Associates
3 4	Programming Perl	1991	Larry Wall and Randall L.	O'Reilly & Associates
	Programming Windows: the	1990	Schwartz Charles Petzold	Microsoft Press
5	Microsoft guide to writing applications for Windows 3	1770		Wile Cosoft Tress
6	Release 1.0 – A Monthly Report	Jan. 22, 1991	Esther Dyson	DT/A
7	Remote Interfaces and File System, Text and Handwriting Classes, Application Classes,	Undated	N/A	N/A
8	Installation Classes, Miscellaneous Classes, and			
9	Windows & UI Toolkit Control Classes			
11	Searching for the Missing Link: Discovering Implicit Structure in Spatial Hypertext	Nov. 1993	Catherine C. Marshall and Frank M.	Association for Computing Machinery
12	sed & awk	1991	Shipman III Dale Dougherty	O'Reilly & Associates
13 14	Sidekick – The Desktop Organizer Just a Keystroke	1985	N/A	Borland International
15 16	Away Sidekick – The Desktop Organizer Just a Keystroke Away (Special Edition for AST	Mar. 1985	N/A	Borland International
17	Research Inc.) Sidekick 2.0 Getting Started	1991	N/A	Borland
18	Sidekick 2.0 User's Guide	1991	N/A	International Borland
19	Sidekick software and screenshots, version 1.52A	1985	N/A	International N/A
20	Sidekick Version 1.5 Owner's Handbook	Mar. 1995	N/A	Borland International Inc.
21	The Simon User Manual1	1994	N/A	IBM
22	The AT&T EO Travel Guide	1993	Ken Maki	John Wiley & Sons, Inc.
23 24	The Computing Strategy Report	Mar. 1991	William M. Bluestein and John C. McCarthy	Forrester Research Inc
<ul><li>25</li><li>26</li></ul>	The file mhonarc (the mail MHonArc Perl script) from the top level of the MHonArc	Oct. 1, 1994	N/A	N/A
27	The file mhonarc.txt from the doc directory of the MHonArc	Oct. 1, 1994	N/A	N/A
28	distribution			

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Title	Date of Publication	Author	Publisher
The Mosaic Handbook for Microsoft Windows	1994	Dale Dougherty and Richard Koman	O'Reilly & Associates
The UNIX Programming Environment	1984	Brian W. Kernighan and Rob Pike	Prentice-Hall Inc.
The Windows Interface Guidelines — A Guide for Designing Software	Feb. 13, 1995	N/A	N/A
The World of Messaging – An Introduction to Personal Communications	1992	Randy Stock	EO Publications
UNIX Applications Programming Mastering the Shell	1990	Ray Swartz	SAMS
UNIX in a Nutshell	1994	Daniel Gilly and the staff of O'Reilly & Associates, Inc.	O'Reilly & Associates
UNIX System V/386 Programmer's Reference Manual	1988	N/A	Prentice Hall
User interface design for the Hyperties electronic encyclopedia	Nov. 1987	Ben Schneiderman	N/A
Using PenPoint [Version 1.0]	1992	N/A	N/A
Using Sidekick: The Desktop Organizer	1988	Phillp R. Robinson	McGraw-Hill
Visual Basic 4 Unleashed	1995	Conrad Scott et al.	Sams Publishing

3. **Systems** 

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '647 Patent, including documents and source code describing the same:

- Apple Message Pad
- Apple Newton
- AppleScript and/or Open Scripting Architecture
- Eager
- EO Personal Communicator 448 and 880

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1	•	Eudora
2	•	GNU Emacs
3	•	GriD Systems
4	•	Homer
5	•	Hypertext
6	•	IBM ThinkPad 700T
7	•	Internet Explorer
8	•	Lotus Notes
9	•	Lynx System
10 11	•	mIRC
12	•	Mosaic
13	•	NCR 3125 and 3130
14	•	NCSA Mosaic for X Window System Version 2.4
15	•	Netscape Navigator
16	•	Newton Operating System
17	•	NeXTSTEP, NeXTStep, and/or OpenSTEP, including NXSpellChecker and
18		NXSpellServer
19	•	PenPoint Operating System
20	•	Perspective
21	•	Selection Recognition Agent
22	•	Sidekick
23	•	Simon
24	•	SNOBAL
25	•	Third-party software for Newton Operating System
26	•	Third-party software for PenPoint Operating System, including but not
27		limited to all editions of PenSoft Perspective
28	•	Visual Basic
		-25- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

Visual CE

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Windows 95 Beta

X Window System

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WordPerfect

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Samsung reserves the right to amend these invalidity contentions to assert these references

6 7 depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other references identified above to render the claims of the '647 Patent obvious in the event Apple takes the position that certain claim limitations are missing from the references charted in Exhibit B.

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#### B. Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders **Obvious the Asserted Claims**

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Plaintiff asserts claims 1-2, 4, 6 and 8-9 of the '647 Patent against Samsung in this lawsuit. All of those claims are invalid because the '647 Patent fails to meet one or more of the requirements for patentability. The individual bases for invalidity are provided below and in the claim charts attached as Exhibit B. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

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Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting

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the portions that are cited. Samsung may also rely on uncited portions of the prior art references,

other disclosed publications, and the testimony of experts to establish that a person of ordinary

skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

## 1. **Anticipation**

Some or all of the asserted claims of the '647 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit B, which identify specific examples of where each limitation of the asserted claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit B, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '647 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. In general, the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit B, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination

with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '647 Patent to combine the various references cited herein so as to practice the asserted claims of the '647 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or the nature of the problems allegedly addressed by the '647 Patent. Combining the references disclosed in Exhibit B would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits B-1 through B-14, which includes exemplary claim charts for the asserted claims of the '647 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '647 Patent would have been obvious in view of the prior art references identified above. For example, Exhibit B includes exemplary claim charts that describe how the asserted claims of the '647 Patent would have been obvious in view of all references identified in Exhibit B, which, if found not to anticipate the claims of the '647 Patent, render the claims of the '647 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any

prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff, information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

# C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function is attached in Exhibits B-1 through B-14.

## D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '647 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

# 1. Invalidity Based on 35 U.S.C. § 101

The asserted claims of the '647 Patent are also invalid under 35 U.S.C. § 101 because they only claim abstract ideas. Many limitations in the asserted claims are common abstractions in

1	computer systems and programming languages. For example, "detecting structures in data and
2	performing actions on detected structures," "an analyzer server for detecting structures in the data,
3	and for linking actions to the detected structures," "a user interface enabling the selection of a
4	detected structure and a linked action," "an action processor for performing the selected action
5	linked to the detected structure," "grammars and a parser for detecting structures in the data," "a
6	string library and a fast string search function for detecting string structures in the data," each refer
7	only to programming abstractions or the manipulation of information; these are concepts, not
8	physical objects or tangible matter.
9	2. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35
10	U.S.C. § 112(1) and/of invalidity based on indefiniteness Under 33
11	Samsung asserts that each asserted claim of the '647 Patent is invalid in that the '647
12	specification fails to particularly point out and distinctly claim the alleged invention of the '647
13	Patent. Samsung further asserts that each asserted claim of the '647 Patent is invalid as not
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specification fails to particularly point out and distinctly claim the alleged invention of the '647 Patent. Samsung further asserts that each asserted claim of the '647 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Apple's infringement contentions, Samsung asserts that claims 1, 2, 4, 6, 8, and 9 of the '647 Patent are invalid for reciting at least the following claim terms/phrases:

- "input device"
- "output device"
- "program routines"
- "detecting structures in the data"
- "analyzer server"
- "linking actions to the detected structures"
- "user interface enabling the selection of a detected structure and a linked action;"

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- "action processor"
- "a fast string search function for detecting string structures in the data"
- "highlights"
- "the user interface enables selection of an action by causing the output device to display a pop-up menu of the linked actions."

These claim terms/phrases as apparently construed by Apple violate the written description, enablement, and/or definiteness requirements of 35 U.S.C. § 112. For instance, the term "fast string search" either fails to quantify how "fast" a string search must be in order to infringe claim 6, or refers to a particular algorithm that is not disclosed anywhere in the claims or specification.

Based on Samsung's present understanding of Apple's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Apple's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification. Moreover, based on Samsung's present understanding of Apple's infringement contentions, each of the asserted claims in which these claim terms/phrases appear lack written description because the specification of the '647 Patent demonstrates that the patentee neither conceived of nor demonstrated possession of all that Apple now contends the claims cover. In addition, based on Samsung's present understanding of Apple's infringement contentions, each of the asserted claims in which these claim terms/phrases appear are invalid because the specification fails to provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains, or with which it is most nearly connected, to implement the invention without undue experimentation.

For at least the reasons set forth above, the claims fail to satisfy the requirements of  $\S 112$   $\P 1$  and 2.

#### III. THE '959 PATENT

## A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '959 Patent:

# 1. Patent References<sup>6</sup>

Country of Origin	<b>Patent Number</b>	Date of Issue	Priority Date
US	3,496,299	Feb. 17, 1970	Nov. 14, 1966
US	4,260,854	Apr. 7, 1981	May 20, 1975
US	5,577,241	Nov. 19, 1996	Dec. 7,1994
US	5,634,053	May 27, 1997	Aug. 29, 1995
US	5,659,732	Aug. 19, 1997	May 17, 1995
US	5,671,426	Sep. 23, 1997	June 22, 1993
US	5,742,816	Apr. 21, 1998	Sep. 15, 1995
US	5,748,512	May 5, 1998	Feb. 28, 1995
US	5,845,278	Dec. 1, 1998	Sep. 12, 1997
US	5,855,015	Dec. 29, 1998	May 12, 1995
US	5,913,205	June 15, 1999	Mar. 28, 1996
US	5,913,215	June 15, 1999	Feb. 19, 1997
US	5,937,406	Aug. 10, 1999	Jan. 31, 1997
US	5,987,446	Nov. 16, 1999	Nov. 12, 1996
US	6,000,020	Dec. 7, 1999	Apr. 1, 1997
US	6,005,565	Dec. 21, 1999	Mar. 25, 1997
US	6,008,799	Dec. 28, 1999	May 24, 1994
US	6,018,342	Jan. 25, 2000	July 3, 1995
US	6,026,429	Feb. 15, 2000	Nov. 10, 1997
US	6,065,003	May 16, 2000	Aug. 19, 1997
US	6,070,158	May 30, 2000	Aug. 14, 1996
US	6,078,914	June 20, 2000	Dec. 9, 1996
US	6,098,065	Aug. 1, 2000	Feb. 13, 1997
US	6,266,094	July 24, 2001	June 14, 1999
US	6,311,182	Oct. 30, 2001	Nov. 17, 1997
US	6,324,534	Nov. 27, 2001	Sep. 10, 1999
US	6,345,269	Feb. 2, 2002	Mar. 26, 1999
US	6,366,915	Apr. 2, 2002	Nov. 4, 1998
US	6,370,543	Apr. 9, 2002	May 24, 1996
US	6,415,285	July 2, 2002	Dec. 8, 1999
US	6,424,968	July 23, 2002	Oct. 15, 1998
US	6,445,834	Sep. 3, 2002	Oct. 19, 1998
US	6,574,632	June 3, 2003	Nov. 18, 1998
US	6,578,048	June 10, 2003	June 5, 1995
US	6,615,172	Sep. 2, 2003	Nov. 12, 1999
US	6,665,640	Dec. 16, 2003	Nov. 12, 1999
US	6,697,835	Feb. 24, 2004	Oct. 28, 1999
US	6,842,758	Jan. 11, 2005	July 30, 1999

<sup>&</sup>lt;sup>6</sup> Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

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# 2. **Publications**<sup>7</sup>

Origin		Date of Issue	Priority Date
US	6,845,370	Jan. 18, 2005	Nov. 19, 1998
US	6,862,713	Mar. 1, 2005	Aug. 31, 1999
US	6,901,366	May 31, 2005	Aug. 26, 1999
US	7,653,614	Jan. 26, 2010	July 15, 1999
US	7,873,995	Jan. 18, 2011	Sep. 29,2003
EP	0706139	Published Apr. 10, 1996	Sep. 9, 1994
WO	98/32289	Published July 23, 1998	Jan. 17, 1997

An Information System Based	1987	Michael	Computing
on Distributed Objects		Caplinger	Machinery
An Information System for	Sep. 1991	Brewster	Online
Corporate Users: Wide Area		Kahle and Art	
Information Servers		Medler	
Annotating the World Wide	1997	Boris Katz	
Web using Natural Language			
ARIADNE: A System for	1998	Jose Luis	SIGMOD
Constructing Mediators for		Ambite,	
Internet Sources		Naveen	
		Ashish, Greg	
		Barish, Craig	
		A. Knoblock,	
		Steven	
		Minton,	
		Pragnesh J.	
		Modi, Ion	
		Muslea,	
		Andrew	
		Philpot and	
		Sheila Tejada	
Browsing Local and Global	1995	Masum	Proceedings of
Information	1775	Hasan, Gene	the 1995
momation		Golovchinsky	conference of
		, Emanuel	the Centre for
		Noik, Nipon	Advanced
		Charoenkitkar	Studies on
		n, Mark	Collaborative
			Research
		Chignell, Alberto	Research
		Mendelzon	
		and David	
D '11' 41 ' C 4 4 C	I 1 1007	Modjeska	T '1 TD 1
Building the infrastructure of	Jan. 1, 1997	Lynch,	Library Trends
resource sharing: union		Clifford	
catalogs, distributed search, and			

<sup>&</sup>lt;sup>7</sup> Samsung incorporates by reference all prior art references identified in the publications listed herein.

-33- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

1	cross-database linkage			
2	The Computer User as Toolsmith	1993	Saul Greenberg	
3	CyberDesk: A Framework for Providing Self-Integrating	1997	Anind K. Dey, Gregory	
4	Ubiquitous Software Services		Abowd, Mike Pinkerton and Andrew	
5			Wood	
6	Dataware Technologies Introduces Dataware II Knowledge Query Server	Sep. 21, 1998		PR Newswire
7	Discover: A Resource		Mark A.	
8	Discovery System based on Content Routing		Sheldon, Andrzej	
9			Duda, Ron Weiss, David K. Gifford	
10	The Distributed Information	1997	Anthony	SIGMOD
11	Search Component (Disco) and the World Wide Web		Tomasic, Remy	
12			Amouroux, Philippe	
13			Bonnet, Olga Kapitskaia, Hubert	
14			Naacke, Louiga	
15			Raschid	
16	Doctor Linux – 5 <sup>th</sup> Edition	1997	John Purcell, ed.	Linux Systems
17	Dragon Systems® Demonstrates First PDA Speech Recognition Technology on the	March 25, 1997		Dragon Systems
18 19	Digital StrongARM Processor in Apple Newton MessagePad			
20	The Effectiveness of GlOSS for		Luis Gravano,	
21	the Text Database Discovery Problem		Hector Garcia- Molina and	
22			Anthony Tomasic	
23	Experience the Internet's most powerful search tool			The WebTools Company
24	Exploring Computer Science with Scheme	1998		Spinger-Verlag New York, Inc.
25	FreeWAIS-sf: A Wide Area Information Server for			
26	Structured Documents and Retrieval Functionality			
27	FreeWAIS-sf	Mar. 30, 1995	Ulrich Pfeifer Tung Huynh	University of Dortmund
28	freeWAIS-sf – UNIDO Edition	Oct. 1995	Ulrich Pfeifer	University of

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0.5		1	Dortmund
Hemlock – An Internet Search	1999	Sean Luke	Dortmund
Tool for the Newton	1999	Sean Luke	
Hemlock An Internet Search			
Tool for the Newton			
Heuristics – Intelligent Search	1984	Judea Pearl	Addison-
Strategies for Computer	1704	Juuca Featt	Wesley
Problem Solving			v csicy
How to Create a WAIS Ouery			
Implementation of the SMART	May 1985	Chris Bucley	
Information Retrieval System	Way 1703	Ciris Ducicy	
The Info Agent: An Interface	1995	Daniela D'	
for Supporting Users in	1775	Aloisi and	
Intelligent Retrieval		Vittorio	
International Rente van		Giannini	
Infoharness: Managing	1999	Kshitij Shah	IEEE Internet
Distributed, Heterogeneous	1///	and Amit	Computing
Information		Sheth	Companing
Information Retrieval	1998	David A.	Kluwer
Algorithms and Heuristics	1//0	Grossman and	Academic
		Ophir Frieder	1 1000011110
Information Retrieval (Z39.50):	1995	5 5 111 1 110001	NISO Press
Application Service Definition	2,,,0		1.12.0 1.1000
and Protocol Specification			
Information Retrieval on the	1997	Venkat N.	IEEE Internet
World Wide Web	-,,,	Gudivada,	Computing
		Vijay V.	F 8
		Raghavan,	
		William I.	
		Grosky and	
		Rajesh	
		Kasanagottu	
INQUERY System Overview	Undated	John Broglio,	
		James P.	
		Callan and W.	
		Bruce Croft	
Internet Fish	May 1996	Brian A.	
		LaMacchia	
An Introduction to Multisensor	1997	David L. Hall	IEEE
Data Fusion		and James	
		Llinas	
Macworld Mac OS 8.5 Bible	1999	Lon Poole	IDG Books
			Worldwide
Mac OS 8.5 – Black Book	1999	Mark R. Bell	The Coriolis
		and Debrah	Group,
		D. Suggs	
Mac OS 8.5: GO FOR IT!	Oct. 29 1998	Michael	The Mac
Part I		Lambert	Observer
Mac OS 8.5: GO FOR IT!	Oct. 29 1998	Michael	The Mac
Part II		Lambert	Observer
Mac OS 8.5 Special Report	1998		MacInTouch
MAC OS 9: The Missing			
Manual Finding Files and			1
Manual – Finding Files and Web Sites with Sherlock 2			

1	MacWAIS Software Version 1.28	Feb. 23, 1994		EINet
2	The MetaCrawler Architecture for Resource Aggregation on	Nov. 8, 1996	Erik Selberg and Oren	
3	the Web Microsoft Universal Data	1998	Etzioni Jose A.	SIGMOD
4 5	Access Platform		Blakeley, Michael J. Pizzo	
6	Microsoft Windows 98 Companion	1998	Martin Matthews	Microsoft Press
7 8	Modern Heuristic Search Methods	1996	V.J. Rayward- Smith, I.H. Osman, C.R. Reeves and G.D. Smith	John Wiley and Sons
9	Multiobjective Heuristic Search	1999	Pallab Dasgupta,	Vieweg
10			P.P. Chakrabarti and S.C.	
12	N. W	1007	Desarkar	AUD
	NetHopper Version 3.0 – User's Manual	1997		AllPen
13 14	Newton Apple MessagePad Handbook	1995		Apple
14	Newton Solutions Guide	1996		Apple Addison-
15	Newton Programmer's Guide			Wesley
16	Northern Light: New Search Engine for the Web and Full- Text Articles	Feb. 1998	Greg Notess	Online
17	Overview of Wide Area	Apr. 1991	Brewster	
18 19	Information Servers Pen Pals	Oct. 12, 1993	Kahle Christopher Barr and Michael	PC Magazine
20	D. D. H. D	1000	Neubarth	
21	Peter Rand's Review of Hemlock	1999	Peter Rand	
22	Rama: An Architecture for Internet Information Filtering	May 1, 1991	Jim Binkley and Leslie Young	Kluwer
23	Search Algorithms Under Different Kinds of Heuristics –	1983	A. Bagchi and A. Mahanti	Indian Institute of Management
24	A Comparative Study Sigerson, A Sherlock Power	Dec. 2, 1998	James	the Mac
25	Booster Sherlock Holmes am	Dec. 1999	Sentman	Observer
26	Newton		D. I. of	ENA 1º
27	Softscape's QuickFind Search and Retrieval Software	Nov. 1997	Robert J. Boeri	EMedia Professional
28	Software Quality Engineering – A Total Technical and	1988	Michael S. Deutsch and	Prentice-Hall

-36- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

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Management Approach		Ronald R. Willis	
Surviving the Storm: Using Metasearch Engines Effectively	May 1999	Randal D. Carlson and Judi Repman	Computers in Libraries
Toward more comprehensive Web searching: single searching versus megasearching	1998	Greg R. Notess	Online
Unix for the Impatient	1996	Paul W. Abrahams and Bruce A. Larson	Addison- Wesley
User's Guide to the Macintosh version of the WAIS interface	1991		Thinking Machines
WAIS, A Sketch Of An Overview	Sep. 23, 1991	Jeff Kellem	
WAIS Search Help			
What is freeWAIS-sf?			
Wide Area Information Servers (WAIS)	June 1994	M. St. Pierre, J. Fullton, K. Gamiel, J. Goldman, B. Kahle, J. Kunze, H. Morris and F. Schiettecatte	
Windows 98 Annoyances	Oct. 1998	David A. Karp	O'Reilly
Windows 98 for Dummies	1999	Andy Rathbone	Wiley
WordPerfect for Windows V 5.2	1992		WordPerfect
Xerox Delivers Global Competitive Advantage to Manufacturing Customers Through Solutions Portfolio	Apr. 27, 1999		Business Wire
Xerox Introduces Two Products to Expand Knowledge Sharing Software Portfolio	Nov. 9, 1999		Business Wire
Xerox unveils "askOnce", which brings a new search dimension to end-users by giving universal access to multiple information sources through one simple query	1999		Xerox
The Z39.50 Information Retrieval Standard – Part I: A Strategic View of Its Past, Present and Future	Apr. 1997	Clifford A. Lynch	D-Lib Magazine

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#### 3. **Systems**

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All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '959 Patent, including documents and source code describing the same:

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**Dragon Systems Speech Recognition** 

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Hemlock

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Linux

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Mac OS 8.5

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Newton 2.0

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NetHopper

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Sherlock Utility

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Unix

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WAIS protocol and WAIStation client

14 15 Windows 98

16 17 depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other references to render the claims of the '959 Patent obvious in the event Apple takes the position that

Samsung reserves the right to amend these invalidity contentions to assert these references

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certain claim limitations are missing from the references charted in Exhibit C.

art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

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#### В. **Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders Obvious the Asserted Claims**

Plaintiff asserts claims 1-5, 9-12, 14-17, 19-20, 22-25, 27-30 and 32-33 of the '959 Patent

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against Samsung in this lawsuit. All of those claims are invalid because the '959 Patent fails to

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meet one or more of the requirements for patentability. The individual bases for invalidity are

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provided below and in the claim charts attached as Exhibit C. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior

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Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '959 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit C, which identify specific examples of where each limitation of the asserted claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit C, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above and in Exhibit C render one or more asserted claims of the '959 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit C, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). It would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '959 Patent to combine the various references cited herein so as to practice the asserted claims of the '959 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or the nature of the problems allegedly addressed by the '959 Patent. Combining the references disclosed in Exhibit C would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits C-1 to C-9, which includes exemplary claim charts for the

asserted claims of the '959 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '959 Patent would have been obvious in view of the prior art references identified above and in Exhibit C. For example, Exhibit C includes claim charts that describe how the asserted claims of the '959 Patent would have been obvious in view of all references identified in Exhibit C, which, if found not to anticipate the claims of the '959 Patent, render the claims of the '959 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff, information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

## C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function are attached in Exhibits C-1 through C-9.

#### D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '959 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

#### 1. Invalidity Based on 35 U.S.C. § 101

The asserted claims of the '959 Patent are invalid under 35 U.S.C. § 101 because they claim only abstract ideas. For example, "using a different heuristic to locate information," "heuristic(s) locates items of information," "providing said information identifier to a plurality of heuristics to locate information in a plurality of locations," and "determining at least one candidate item of information," each refer only to programming abstractions or the manipulation of information; these are concepts, not physical objects or tangible matter.

# 2. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '959 Patent is invalid in that the '959 specification fails to particularly point out and distinctly claim the alleged invention of the '959 Patent. Samsung further asserts that each asserted claim of the '959 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Plaintiff's infringement contentions, Samsung asserts that claims 1-5, 9-12, 14-17, 19-20, 22-25, 27-30 and 32-33 of the '959 Patent are

invalid for reciting at least the claim terms "heuristic" and/or "heuristics." Based on Samsung's present understanding of Plaintiff's infringement contentions, Samsung further asserts that claims 9-12, 14-16, 22, 23, 27, 28, 32 and 33 are invalid for reciting at least the claim term/phrase "heuristics locates" and one or more of the following phrases:

- "one of said heuristics locates information on the basis of names of files"
- "another of said heuristics locates items of information on the basis contents of files"
- "another of said heuristics locates items of information on the basis of most recently accessed items"
- "one of said heuristics locates items of information that are stored locally on a computer system"
- "another of said heuristics locates items of information that are stored on remote computer systems"
- "said other heuristic locates Internet web pages"
- "said other heuristic locates items of information that are stored on a wide-area network"

Also based on Samsung's present understanding of Plaintiff's infringement contentions, Samsung further asserts that claims 20, 25, and 30 are invalid for reciting at least the claim term/phrase "the information identifier is applied separately to each heuristic." Samsung also asserts that claim 24 is invalid for reciting "program instructions." Claims 24, 25, 27-30, 32 and 33 are invalid for reciting "determin[ing] at least one candidate item of information based upon the plurality of heuristics." These claim terms/phrases as apparently construed by Apple violate the written description, enablement and/or definiteness requirements of 35 U.S.C. § 112.

Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification.

Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear lack written description because the specification of the '959 Patent demonstrates that the patentee neither conceived of nor demonstrated possession of all that Plaintiff now contends the claims cover.

Samsung further asserts that claims 29, 20, 32 and 33 are invalid for reciting at least the following claim terms/phrases:

- "means for inputting an information identifier"
- "means for providing said information identifier to a plurality of heuristics . . ."
- "means for determining at least one candidate item of information based upon the plurality of heuristics,"
- "means for displaying a representation of said candidate item of information." Each of these claim limitations is governed by 35 U.S.C. § 112, paragraph 6. The '959 patent specification, however, fails to set forth the structure, material or acts for accomplishing the recited function. Each of these claims is therefore invalid as indefinite under 35 U.S.C. § 112(2).

In addition, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which the terms identified above appear are invalid because the specification fails to provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains, or with which it is most nearly connected, to implement the invention without undue experimentation. The '959 patent specification fails to describe the manner and process of making and using the claimed invention in such full, clear concise and exact terms as to enable a person of ordinary skill in the art to which it pertains to make and use the claimed invention.

For at least the reasons set forth above, the claims fail to satisfy the requirements of  $\S 112$   $\P \P 1$  and 2.

#### IV. THE '414 PATENT

#### A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '414 Patent:

## 1. **Patent References**<sup>8</sup>

Country of Origin	<b>Patent Number</b>	Date of Issue	Priority Date
US	5,255,388	Oct. 19, 1993	Sep. 26, 1990
US	5,473,776	Dec. 5, 1995	Feb. 16, 1993
US	5,515,502	May 7, 1996	Sep. 30, 1993
US	5,729,710	Mar. 17, 1998	June 22, 1994
US	5,734,910	Mar. 31, 1998	Dec. 22, 1995
US	5,937,414	Aug. 10, 1999	Feb. 28, 1997
US	6,012,081	Jan. 4, 2000	July 3, 1996
US	6,014,681	Jan. 11, 2000	July 15, 1997
US	6,021,414	Feb. 1, 2000	Sep. 11, 1995
US	6,260,075	July 10, 2001	June 19, 1995
US	6,643,669	Nov. 4, 2003	Mar. 14, 2000
US	6,662,212	Dec. 9, 2003	Aug. 31, 1999
US	6,662,212	Dec. 9, 2003	Aug. 31, 1999
US	6,671,700	Dec. 30, 2003	May 23, 2000
US	6,983,247	Jan. 3, 2006	June 26, 2002
US	7,024,491	Apr. 4, 2006	May 23, 2001
US	7,024,491	Apr. 4, 2006	May 23, 2001
US	7,158,998	Jan. 2, 2007	July 31, 2002
US	7,158,998	Jan. 2, 2007	July 31, 2002
US	7,290,034	Oct. 30, 2007	May 7, 2004
US	7,290,034	Oct. 30, 2007	May 7, 2004
US	7,366,743	Apr. 29, 2008	Mar. 6, 2002
US	7,370,025	May 6, 2008	Dec. 17, 2002
US	7,403,958	July 22, 2008	Jan. 19, 2005
US	7,412,460	Aug. 12, 2008	June 19, 2003
US	7,430,426	Sep. 30, 2008	Jan. 24, 2005
US	7,457,846	Nov. 25, 2008	Oct. 5, 2001
US	7,477,890	Jan. 13, 2009	June 30, 2000
US	7,503,052	Mar. 10, 2009	Apr. 14, 2004
US	7,506,006	Mar. 17,2009	Sep. 3, 2004
US	7,506,006	Mar. 17, 2009	Sep. 3, 2004
US	7,506,006	Mar. 17, 2009	Apr. 13, 2006
US	7,523,344	Apr. 21, 2009	June 19, 2006
US	7,546,364	June 9, 2009	May 16, 2002
US	7,752,166	July 6, 2010	Nov. 15, 2001
US	7,752,166	July 6, 2010	Nov. 15, 2001
US	7,788,225	Aug. 31, 2010	Mar. 18, 2005
US	7,849,140	Dec. 7, 2010	Aug. 29, 2002
US	7,877,797	Jan. 25, 2011	Feb. 23, 2006
US	7,877,797	Jan. 25, 2011	Feb. 23, 2006
US	8,005,889	Aug. 23, 2011	Nov. 16, 2005
US	8,005,889	Aug. 23, 2011	Nov. 16, 2005
US	8,121,978	Feb. 21, 2012	Sep. 11, 2003
US	2006/0026198	Feb. 2, 2006	July 30, 2004
US	2002/0059299	May 16, 2002	Jan. 23, 2001
US	2003/0149762	August 7, 2003	Oct. 5, 2001

<sup>&</sup>lt;sup>8</sup> Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

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Country of Origin	<b>Patent Number</b>	Date of Issue	Priority Date
US	2005/0278458	Dec. 15, 2005	June 9, 2004
US	2007/0180447	Aug. 2, 2007	Nov. 14, 2006
US	2008/0066148	Mar. 13, 2008	Oct. 30, 2007
IIS	2008/0256547	Feb 23 2005	Oct 16 2008

## 2. **Publications**<sup>9</sup>

Title	Date of Publication	Author	Publisher
A New Service from Notify Technology The NotifyLink Hosted Edition	Dec. 31, 2005		Notify Technology
Advanced Windows The Developer's Guide to the Win32® API for Windows NT <sup>TM</sup> 3.5 and Windows 95	1995	Jeffrey Richter	Microsoft
Bayou: Replicated Database Services for World-wide Applications	1996	Karin Petersen, Mike Spreitzer, Douglas Terry, Marvin Theimer	Association for Computing Machinery
BlackBerry Application Developer Guide Volume 1: Fundamentals	Oct. 13, 2005		RIM
BlackBerry Application Developer Guide Volume 2: Advanced Topics	Oct. 13, 2005		RIM
BlackBerry Enterprise Server for Microsoft Exchange Version 4.0 Feature and Technical Overview	Nov. 10, 2004		RIM
BlackBerry Enterprise Software v4.0 for Microsoft Exchange: Feature Enhancement Overview	2004		RIM
BlackBerry Wireless Handheld Version 4.1 User Guide: BlackBerry 7520	Sep. 7, 2005		RIM
DataViz - RoadSync Series 80 Manual			DataViz
Developing Multithreaded Applications for the .NET Compact Framework	June 2005	Maarten Struys	Microsoft
EasyStreet: A location management and data synchronization application for mobile computing	July 19, 2000	Steven J. Mastrianni	
Eliminating duplication and ensuring file integrity in	Dec. 2005	Muaz Niazi, Umar Manzoor,	IEEE

<sup>&</sup>lt;sup>9</sup> Samsung incorporates by reference all prior art references identified in the publications listed herein.

	<u> </u>			
1	Title	Date of Publication	Author	Publisher
2	Multisync: A multiagent system for ubiquitous file	A GOMEGIA	Kiran Ijaz, Summiya and	
3 4	synchronization Effective Java	2001	Hina Saleem Joshua Bloch	Addison- Wesley
5	Exchange ActiveSync and	July 6, 2005		Microsoft
6	Exchange 2003 Exchange Information	May 23, 2005		Microsoft
7	Store Service Architecture Flexible and safe resolution of file conflicts	1994	Puneet Kumar and M. Satyanarayanan	DTIC
8	Flexible Update Propagation for Weakly Consistent Replication	1997	Karin Petersen, M.J. Spreitzer, D.B. Terry,	Association for Computing Machinery
10	Consistent Replication		M.M. Theimer, A.J. Demers	Widefillery
11	Getting Started Guide: BlackBerry 8700c Wireless Handheld <sup>TM</sup> from Cingular	2005		RIM
12 13	IETF RFC 2251: Lightweight Directory Access Protocol v3	Dec. 1997	M. Wahl, T. Howes and S. Kille	IETF
14	IETF RFC 3377: Lightweight Directory Access Protocol v3:	Sep. 2002	J. Hodges and R. Morgan	IETF
15	Technical Specification IETF RFC 3501: Internet	March 2003	M. Crispin	IETF
16 17	Message Access Protocol – Version 4rev1			
18	Introduction to Microsoft Exchange Server 2003	July 2004		Microsoft
19	Introduction to Multi- Threaded Programming	May 1, 1999	Brian Masney	Linux Journal
20	Jabber Based Protocol for Collaborative Mobile Work	Sep. 7, 2005 Sep. 16, 2006	Martin Klima and Pavel Slavik	Apple Springer-Verlag Berlin Heidelberg
21   22	Java in a Nutshell 2 <sup>nd</sup> Edition	May 1997	David Flanagan	O'Reilly
23	Mail Anywhere Studio	2002		iAnywhere Solutions
24	Towards the Ubiquitous Office Vision With focus on Mobile Data	Mar. 2002	Fredrik Hacklin	
<ul><li>25</li><li>26</li></ul>	Synchronization  Managing Update Conflicts in Bayou, a Weakly	1995	D.B. Terry, M.M. Theimer,	Association for Computing
27 28	Connected Replicated Storage System		Karin Petersen, A.J. Demers, M.J. Spreitzer, C.H. Hauser	Machinery

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Title	Date of Publication	Author	Publisher
Microsoft Exchange Server 2003 ActiveSync Architecture	Jan. 5, 2003	Steven D. Bramson and Marc Gallucci	Microsoft
Microsoft Improves Access to Customer Data with New Smart Client Solution	Dec. 2005		Microsoft
Microsoft Smart Client Architecture and Design Guide	Sept. 4, 2004	David Hill, Brenton Webster, Edward A. Jezierski, Srinath Vasireddy, Mo Al-Sabt, Blaine Wastell, Jonathan Rasmusson, Paul Gale and Paul Slater	Microsoft
Modern Operating Systems Second Edition	2001	Andrew Tanenbaum	Prentice Hall
NotifyLink Hosted Edition White Paper	Nov. 13, 2006		Notify Technology
Novell Evolution 2.4 User Guide	Sep. 7, 2005		Novell
Object Based Concurrency for Data Parallel Applications: Programmability and Effectiveness	2002	Roxana Diaconescu	Norwegian University of Science and Technology
OneBridge Mobile Groupware Product Datasheet	2006		iAnywhere Solutions
Palm Pilot The Ultimate Guide	1999	David Pogue	O'Reilly
Primarily Disconnected Operation: Experiences with Ficus	Nov. 1992	J. S. Heidemann, T. W. Page, R. G. Guy and G. J. Popek	IEEE
Pylon Anywhere Client User's Guide	2003		iAnywhere Solutions
RCal: An Autonomous Agent for Intelligent Distributed Meeting Scheduling	Nov. 2003	Rahul Singh	Carnegie Mellon University
Resolving file conflicts in the Ficus file system	1994	Peter Reiher, John Heidemann, David Ratner, Greg Skinner, and Gerald	Association for Computing Machinery

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Title	Date of Publication	Author	Publisher
		Popek	
SemanticLIFE - Outlook Datafeed Module Software Architecture Document Version 2.0	Apr. 20, 2005	Hoang Huu Hanh	
SunOS Multi-thread architecture	1991	M. L. Powell, S. R. Kleiman, S. Barton, D. Shah, D. Stein, M. Weeks	
The Bayou Architecture: Support for Data Sharing among Mobile Users	1994	K. Petersen, M. Spreitzer, D. Ferry, M. Theimer, B. Welch	IEEE
The Case for Non- transparent Replication: Examples from Bayou	1998	Douglas B. Terry, Karin Petersen, Mike J. Spreitzer, Marvin M. Theimer	IEEE
The Open Group Base Specifications Issue 6	2004		IEEE
Unix Applications Programming Mastering the Shell	1990	Ray Swartz	Sams Publishing
Using Your Palm® Treo <sup>TM</sup>	2006		Palm
700w Smartphone Visto Mobile <sup>TM</sup> Personal Edition for Professionals	2005		Visto
Windows CE handheld systems for the corporate mobile work force	Mar. 30, 2005	Steven J. Mastrianni	
SCH-i830 Series Global Pocket PC Phone User Manual	2005		Samsung
Windows Mobile Software for Pocket PC: Pocket Outlook	July 1, 2005		Microsoft
Windows Mobile Software for Pocket PC Phone Edition	Sep. 19, 2003		Microsoft

### 3. Systems

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '414 Patent, including documents and source code describing the same:

• Novell Evolution (at least 2.4)

1	• Ficus				
2	• Coda				
3	• Bayou				
4	Mozilla Thunderbird				
5	• SyncKolab				
6	Mozilla Lightning Project				
7	• Coldsync				
8	• iTunes (at least version 6.0.1), and, for example, Apple Macintosh OS X 10.3.9 /				
9	iPod nano / Mac Address Book				
10	• iSync (at least version 1.4), and, for example, Apple Macintosh OS X 10.3.9 / iPod				
11	nano / Mac Address Book				
12	Microsoft Exchange ActiveSync / SCH-i830 Series Global Pocket PC Phone /				
13	Palm® Treo™ 700w Smartphone / Pocket Outlook				
14	Blackberry / BlackBerry Wireless Handheld Version 4.1				
15	NotifyLink Hosted Edition				
16	Samsung reserves the right to amend these invalidity contentions to assert these references				
17	depending on the claim construction and infringement positions Apple may take as the case				
18	proceeds. Moreover, Samsung reserves the right to use these references in combination with other				
19	references to render the claims of the '414 Patent obvious in the event Apple takes the position that				
20	certain claim limitations are missing from the references charted in Exhibit D.				
21	B. Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders				
22	Obvious the Asserted Claims				
23	Plaintiff asserts claims 1-2, 4, 6-7, 10-12, 14, 16-17, 20-24, 26-28 and 30-32 of the '414				
24	Patent against Samsung in this lawsuit. All of those claims are invalid because the '414 Patent				
25	fails to meet one or more of the requirements for patentability. The individual bases for invalidity				
26	are provided below and in the claim charts attached as Exhibit D. Each of the foregoing listed				
27	prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as				
28	prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.				

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Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '414 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit D, which identify specific examples of where each limitation of the asserted claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit D, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '414 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit D, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '414 Patent to combine the various references cited herein so as to practice the asserted claims of the '414 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or the nature of the problems allegedly addressed by the '414 Patent. Combining the references disclosed in Exhibit D would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits D 1-14, which includes exemplary claim charts for the

asserted claims of the '414 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '414 Patent would have been obvious in view of the prior art references identified above. For example, Exhibit D includes exemplary claim charts that describe how the asserted claims of the '414 Patent would have been obvious in view of all references identified in Exhibit D, which, if found not to anticipate the claims of the '414 Patent, render the claims of the '414 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff, information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

## C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function is attached in Exhibits D-1 through D-14.

#### D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '414 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

### 1. Invalidity Based on 35 U.S.C. § 101

The asserted claims of the '414 Patent are invalid under 35 U.S.C. § 101 because they only claim abstract ideas. Many limitations in the asserted claims are common abstractions in computer systems and programming languages. For example, the limitations "one user-level non-synchronization processing thread," "one synchronization processing thread," "a lock on the first store," "releases the lock after synchronization for a first data class is completed," and "synchronized in a peer-to-peer manner," each refer only to programming abstractions or the manipulation of information; these are concepts, not physical objects or tangible matter.

# 2. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '414 Patent is invalid in that the '414 specification fails to particularly point out and distinctly claim the alleged invention of the '414 Patent. Samsung further asserts that each asserted claim of the '414 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Plaintiff's infringement contentions, Samsung asserts that the asserted claims of the '414 Patent are invalid under 35 U.S.C. § 112 ¶ 1 at least because they include the following claim terms/phrases:

- "one user-level non-synchronization processing thread,"
- "one user-level non-synchronization processing thread,"
- "concurrently,"
- "user interface to allow a user to access and edit structured data in a first store associated with a first database,"
- "one synchronization processing thread,"
- "synchronization software component which is configured to synchronize the structured data from the first database with the structured data from a second database,"
- "a lock on the first store,"
- "releases the lock after synchronization for a first data class is completed,"
- "synchronized in a peer-to-peer manner," and
- "synchronize structured data of a first data class and other synchronization software components are configured to synchronize structured data of other corresponding data classes."

These claim terms/phrases as apparently construed by Apple violate the written description and/or enablement requirements of 35 U.S.C. § 112 ¶ 1. For instance, the term "peer-to-peer" is broader than and inconsistent with the alleged invention disclosed in the specification, and given Apple's infringement contentions, one of ordinary skill in the art would not understand what Apple has claimed. Additionally, claims 7 and 17 of the '414 patent are invalid because they lack a proper antecedent basis for at least the term "first and second data processing systems."

Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification.

Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each
of the asserted claims in which these claim terms/phrases appear lack written description because
the specification of the '414 Patent demonstrates that the patentee neither conceived of nor
demonstrated possession of all that Apple now contends the claims cover. In addition, based on
Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted
claims in which these claim terms/phrases appear are invalid because the specification fails to
provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains,
or with which it is most nearly connected, to implement the invention without undue
experimentation. Therefore, the claims fail to satisfy the requirements of $\S 112 \P 1$ and 2.
Samsung further asserts that claims 21, 22, 31, and 32 are invalid for reciting at least the

following claim limitations:

- "means for executing at least one user-level non-synchronization processing thread that includes means for accessing structured data in a first store associated with a first database;"
- "means for executing at least one synchronization processing thread concurrently with the executing of the at least one user-level non-synchronization processing thread that includes means for synchronizing the structured data from the first database with the structured data from a second database;"
- "means for executing at least one non-synchronization processing thread;"
- "means for accessing structured data in a first store associated with a first database;"
- "means for executing at least one synchronization processing thread concurrently with the executing of the at least one non-synchronization processing thread that includes means for synchronizing the structured data from the first database with the structured data from a second database."

Each of those claim limitations is governed by 35 U.S.C. section 112, paragraph 6. The '414 patent specification, however, fails to set forth the structure, material or acts for accomplishing the recited function. Each of these claims is therefore invalid as indefinite under 35 U.S.C. § 112(2).

#### V. THE '760 PATENT

#### A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '760 Patent:

## 1. Patent References<sup>10</sup>

Country of Origin	Patent Number	Date of Issue	Priority Date
US	6,430,405	Aug. 6, 2002	Dec. 7, 1998
US	6,448,988	Sep. 10, 2002	Jan. 29, 1997
US	6,526,274	Feb. 25, 2003	Oct. 25, 1999
US	6,542,591	Apr. 1, 2003	July 27, 2000
US	6,549,612	Apr. 15, 2003	May 6, 1998
US	6,738,461	May 18, 2004	Nov. 1, 2001
US	6,772,188	Aug. 3, 2004	July 14, 2000
US	6,792,082	Sep. 14, 2004	Sep. 11, 1998
US	6,879,691	Apr. 12, 2005	May 12, 2000
US	6,961,420	Nov. 1, 2005	Nov. 13, 2001
US	7,007,239	Feb. 28, 2006	Sep. 21, 2000
US	7,117,445	Oct. 3, 2006	June 30, 2003
US	7,212,808	May 1, 2007	Oct. 15, 2002
US	7,221,748	May 22, 2007	Nov. 12, 2002
US	7,225,409	May 29, 2007	Aug. 25, 1999
US	7,231,229	June 12, 2007	Mar. 16, 2003
US	7,280,652	Oct. 9, 2007	Sep. 13, 2004
US	7,280,850	Oct. 9, 2007	Sep. 27, 2001
US	7,289,614	Oct. 30, 2007	Sep. 29, 2000
US	7,403,767	July 22, 2008	Apr. 29, 2005
US	7,409,050	Aug. 5, 2008	Apr. 21, 2005
US	7,493,567	Feb. 17, 2009	Jan. 28, 2004
US	7,502,633	Mar. 10, 2009	Oct. 15, 2002
US	7,526,306	Apr. 28, 2009	Dec. 8, 2003
US	7,606,598	Oct. 20, 2009	Mar. 31, 2006
US	7,680,513	Mar. 16, 2010	Aug. 8, 2005
US	7,623,643	Nov. 24, 2009	July 26, 2005
US	7,680,513	Mar. 16, 2010	Aug. 8, 2005
US	7,685,530	Mar. 23, 2010	June 10, 2005
US	7,715,535	May 11, 2010	Sep. 27, 2005

Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

Case No. 12-cv-00

**Date of Issue** 

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US 7,724,887 May 25, 2010 July 21, 2005 US 7,778,399 Aug. 17, 2010 July 2, 2004 US 7,778,671 Aug. 17, 2010 Oct. 8, 2004 US 7,779,630 Sep. 14, 2010 June 24, 2004 US 7,779,630 Sep. 14, 2010 Sep. 8, 2004 US 7,783,283 Aug. 24, 2010 Sep. 8, 2004 US 7,839,987 Nov. 23, 2010 Nov. 1, 2001 US 7,839,987 Feb. 22, 2011 Oct. 12, 2005 US 7,920,886 Apr. 5, 2011 Jan. 24, 2006 US 7,991,432 Aug. 2, 2011 Apr. 2, 2004 US 8,011,120 Aug. 16, 2011 Feb. 12, 2004 US 8,019,388 Sep. 13, 2011 Feb. 12, 2004 US 8,019,388 Sep. 13, 2011 Feb. 14, 2006 US 8,04,886 Nov. 22, 2011 Feb. 14, 2006 US 8,095,879 Jan. 10, 2012 Dec. 10, 2002 US 8,175,656 May 8, 2012 Feb. 24, 2006 US 2002/0076015 June 20, 2002 Dec. 15, 2000 US 2002/0111991 Aug. 15, 2002 Dec. 15, 2000 US 2002/0116464 Aug. 22, 2002 Feb. 20, 2001 US 2004/0235520 Nov. 25, 2004 May 20, 2003 US 2004/035520 Nov. 25, 2004 May 20, 2003 US 2005/0250483 Nov. 10, 2005 Aug. 28, 2003 US 2005/0250487 Dec. 30, 2004 June 30, 2003 US 2005/074109 Apr. 7, 2005 Sep. 24, 2004 US 2006/0140189 June 29, 2006 Dec. 23, 2004 US 2006/0140189 June 29, 2006 Dec. 23, 2004 US 2006/0140189 June 29, 2006 Dec. 23, 2004 US 2007/0083600 Apr. 12, 2007 Sep. 21, 2005 US 2007/0083600 Apr. 12, 2007 Sep. 21, 2005 US 2007/0083600 Apr. 12, 2007 Sep. 30, 2005 US 2007/0133771 June 14, 2007 Dec. 12, 2005 US 2007/0243858 Oct. 18, 2007 Apr. 18, 2006	<u> </u>			
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US         2005/0074109         Apr. 7, 2005         Sep. 24, 2004           US         2005/0141686         June 30, 2005         June 7, 2004           US         2006/0010395         Jan. 12, 2006         July 9, 2004           US         2006/0140189         June 29, 2006         Dec. 23, 2004           US         2006/0281449         Dec. 14, 2006         June 14, 2005           US         2007/0071186         Mar. 29, 2007         Sep. 21, 2005           US         2007/0083600         Apr. 12,2007         Oct. 6, 2005           US         2007/0092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006	US	2004/0267887	Dec. 30, 2004	
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US         2006/0010395         Jan. 12, 2006         July 9, 2004           US         2006/0140189         June 29, 2006         Dec. 23, 2004           US         2006/0281449         Dec. 14, 2006         June 14, 2005           US         2007/0071186         Mar. 29, 2007         Sep. 21, 2005           US         2007/0083600         Apr. 12,2007         Oct. 6, 2005           US         2007/092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006		2005/0074109	Apr. 7, 2005	
US         2006/0140189         June 29, 2006         Dec. 23, 2004           US         2006/0281449         Dec. 14, 2006         June 14, 2005           US         2007/0071186         Mar. 29, 2007         Sep. 21, 2005           US         2007/0083600         Apr. 12,2007         Oct. 6, 2005           US         2007/0092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006		2005/0141686		
US         2006/0281449         Dec. 14, 2006         June 14, 2005           US         2007/0071186         Mar. 29, 2007         Sep. 21, 2005           US         2007/0083600         Apr. 12,2007         Oct. 6, 2005           US         2007/0092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006		2006/0010395		July 9, 2004
US         2007/0071186         Mar. 29, 2007         Sep. 21, 2005           US         2007/0083600         Apr. 12,2007         Oct. 6, 2005           US         2007/0092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006		2006/0140189		Dec. 23, 2004
US         2007/0083600         Apr. 12,2007         Oct. 6, 2005           US         2007/0092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006				
US         2007/0092072         Apr. 26, 2007         Sep. 30, 2005           US         2007/0133771         June 14, 2007         Dec. 12, 2005           US         2007/0243858         Oct. 18, 2007         Apr. 18, 2006		2007/0071186		
US 2007/0133771 June 14, 2007 Dec. 12, 2005 US 2007/0243858 Oct. 18, 2007 Apr. 18, 2006				
US 2007/0243858 Oct. 18, 2007 Apr. 18, 2006		2007/0092072		
	US	2007/0243858		
			Dec. 6, 2007	June 2, 2006
US 2008/0295017 Nov. 27, 2008 Sep. 5, 2006				
EP 1 069 791 Jan. 17, 2001 July 13, 1999				
EP 1 365 564 Nov. 26, 2003 Apr. 30, 2003	EP	1 365 564	Nov. 26, 2003	Apr. 30, 2003

## 2. **Publications**<sup>11</sup>

Title	Date of Publication	Author	Publisher
Exploring PC-Telephone Convergence with the Enhanced Telephony Prototype	Apr. 2004	JJ Cadiz, Attila Narin, Gavin Jancke, Anoop Gupta, and Michael Boyle	Association for Computing Machinery
Finger Instead of Mouse:	2003	Andreas	Springer-Verlag

Samsung incorporates by reference all prior art references identified in the publications listed herein.

**Priority Date** 

Date of

**Publication** 

2006

Mar. 2006

2002

1997

1998

Dec. 2003

1999

June 15, 2006

Jan. 24, 2006

2002

Apr. 1, 2004

2006

2004

July 14, 2005

Author

Holzinger

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3. **Systems** 

Title

Touch Screens as a Means of Enhancing Universal

Protocol Mode User Guide Motorola A1000 User Guide

Nokia 9000i User's Manual

TAKEphONE User Manual

TealPhone User's Manual

Smartphone: Reference

User's Guide Agendus for

Symbian OS UIO Edition Using Your Palm® Treo<sup>TM</sup>

XPlore M98 User Manual

700w Smartphone using your Treo<sup>TM</sup> 650

The Kyocera 7135

Nokia 9110 User's Manual

P900/P908 White Paper pdQ<sup>TM</sup> Applications

Ming User Manual

Model 8690 Inter-Tel

Success

Handbook

Guide

smartphone

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '760 Patent, including documents and source code describing the same:

- Agenda Fusion
- Agendus Professional
- Motorola A1200
- TealPhone
- Windows Mobile 5

Samsung reserves the right to amend these invalidity contentions to assert these references depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other

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Publisher

Motorola

Inter-Tel

Motorola

Motorola

Iambic

TealPoint Software

Kyocera

Iambic

Palm

Palm

PDA

Group Sense

Sony Ericsson

Nokia

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references to render the claims of the '760 Patent obvious in the event Apple takes the position that certain claim limitations are missing from the references charted in Exhibit E.

#### В. **Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders Obvious the Asserted Claims**

Plaintiff asserts claims 1-5 and 7-22 of the '760 Patent against Samsung in this lawsuit. All of those claims are invalid because the '760 Patent fails to meet one or more of the requirements for patentability. The individual bases for invalidity are provided below and in the claim charts attached as Exhibit E. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '760 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit E, which identify specific examples of where each limitation of the asserted

claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit E, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '760 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit E, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '760 Patent to combine the various references cited herein so as to practice the asserted claims of the '760 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or

the nature of the problems allegedly addressed by the '760 Patent. Combining the references disclosed in Exhibit E would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits E-1 to E-8, which includes exemplary claim charts for the asserted claims of the '760 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '760 Patent would have been obvious in view of the prior art references identified above. For example, Exhibit E includes exemplary claim charts that describe how the asserted claims of the '760 Patent would have been obvious in view of all references identified in Exhibit E, which, if found not to anticipate the claims of the '760 Patent, render the claims of the '760 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff,

information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

## C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function is attached in Exhibits E-1 to E-8.

## D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '760 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

# 1. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '760 Patent is invalid in that the '760 specification fails to particularly point out and distinctly claim the alleged invention of the '760 Patent. Samsung further asserts that each asserted claim of the '760 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Apple's infringement contentions, Samsung asserts that claims 8, 10, 14, 18, 19, 21 of the '760 Patent are invalid as indefinite because they

1	combine method and apparatus limitations. Samsung further asserts that claims 1, 3, 7, 8, 10, 12-
2	22 of the '760 Patent are invalid as indefinite for reciting at least the following claim
3	terms/phrases:
4	"interactive displayed portion"
5 6	• "immediately in response to detecting" / "detecting a user tap input and immediately in response to that input"
7	"initiating a return telephone call"
8	• "finger gesture" / "finger tap input" / "user tap input"
9	"detecting user selection"
10 11	<ul> <li>"completely substituting display of the list of interactive items with display of contact information"</li> </ul>
12	"a first contact object comprising a telephone number object having the return telephone number" / "a first contact object comprising a telephone number
13 14	<ul><li>associated with the caller"</li><li>"non-telephonic communication modality"</li></ul>
15 16	"a second contact object associated with a non-telephonic communication modality"
17	"initiating a communication "
18	• "instant messaging" / "instant message"
19 20	• "the second interactive displayed portion of the respective user selected item is identified by an icon displayed within the respective user selected item"
21	"associated with a missed call" / "associated with contact information"
22	• "associated with sending an email" / "associated with sending an instant message"
23	• "that input"
24	• "the finger tap input"
25	• "that interactive displayed item"
26	
27	"the selected interactive displayed item"
28	

These claim terms/phrases as apparently construed by Apple violate the written description, enablement and/or definiteness requirements of 35 U.S.C. § 112.

Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification. Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear lack written description because the specification of the '760 Patent demonstrates that the patentee neither conceived of nor demonstrated possession of all that Apple now contends the claims cover.

Samsung further asserts that claims 8-11, 14, 18-19, 21 are invalid for reciting at least the following claim terms/phrases:

- "instructions, which . . . cause the device to: display . . . " / "instructions for . . . displaying . . . " / "instructions to display . . . "
- "instructions, which . . . cause the device to: . . . completely substituting display . . . " / "instructions for . . . completely substituting display . . . " / "instructions to . . . completely substituting display . . . "
- "instructions, which . . . cause the device to: . . . initiate a return telephone call . . ." / "instructions for . . . initiating a telephone call . . ." / "instructions to . . . initiate a telephone call . . ."
- "instructions, which . . . cause the device to: . . . initiate a communication . . . " / "instructions for . . . initiating a communication . . . " / "instructions to . . . initiate a communication . . . "
- "instructions to receive a finger tap input . . ." / "the portable electronic device is configured to: receive a finger tap input . . ." / "instructions, which . . . receive a finger tap input . . ."
- "instructions to detect a finger tap input . . . " / "instructions for . . . detecting . . . " / "instructions that . . . cause the device to . . . detect . . . "

Each of these claim limitations is governed by 35 U.S.C. § 112, paragraph 6. The '760 patent specification, however, fails to set forth the structure, material or acts for accomplishing the

claimed instructions. Each of these claims is therefore invalid as indefinite under 35 U.S.C. § 112(2).

In addition, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear are invalid because the specification fails to provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains, or with which it is most nearly connected, to implement the invention without undue experimentation.

For at least the reasons set forth above, the claims fail to satisfy the requirements of  $\S 112$   $\P 1$  and 2.

#### VI. THE '721 PATENT

#### A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '721 Patent:

### 1. Patent References<sup>12</sup>

Country of Origin	Patent Number	Date of Issue	Priority Date
US	6,421,453	July 16, 2002	May 15, 1998
US	6,545,669	Apr. 8, 2003	Mar. 26, 1999
US	7,084,859	Aug. 1, 2006	Sep. 18, 1992
US	7,113,177	Sep. 26, 2006	Apr. 4, 2002
US	7,216,116	May 8, 2007	May 2, 1997
US	7,365,736	Apr. 29, 2008	Mar. 23, 2004
US	7,425,944	Sep. 16, 2008	July 1, 2005
US	7,546,548	June 9, 2009	June 28, 2002
US	7,653,818	Jan. 26, 2010	July 21, 2005
US	7,800,587	Sep. 21, 2010	Aug. 11, 2005
US	8,117,701	Feb. 21, 2012	July 7, 2006
US	8,127,141	Feb. 28, 2012	Oct. 29, 2002
US	2002/0029341	Mar. 7, 2002	Feb. 10, 2000
US	2002/0104005	Aug. 1, 2002	Jan. 31, 2001
US	2006/0012577	Jan. 19, 2006	July 16, 2004
US	2006/0064004	Mar. 23, 2006	Sep. 15, 2005
US	2006/0075250	Apr. 6, 2006	Sep. 24, 2004
US	2006/0092177	May 4,2006	Oct. 30, 2004
US	2006/0209014	Sep. 21, 2006	Mar. 16, 2005
US	2007/0135091	June 14, 2007	Dec. 8, 2005

Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

-66-

ase No. 12-cy-00630-I HK

1	Country of Origin	Patent Number	Date of Issue	Priority Date
2	US	8,095,87	Jan. 10, 2012	Dec. 10, 2002
	WO	01/77792	Oct. 18, 2001	Apr. 7, 2000
3	WO	03/038569	May 8, 2003	Oct. 30, 2001
	EP	1 964 022	Mar. 10, 2010	Dec. 23, 2005
4	US	5,293,908	Mar. 15, 1994	Feb. 24, 1993
_	US	5,465,084	Nov. 7, 1995	Mar. 27, 1990
5	US	5,559,961	Sep. 24, 1996	Aug. 30, 1995
6	US	5,677,710	Oct. 14, 1997	May 10, 1993
١	US	5,821,933	Oct. 13, 1998	Sep. 14, 1995
7	US	5,907,327	May 25, 1999	Aug. 15, 1997
	US	5,923,908	July 13, 1999	Oct. 30, 1997
8	US	6,151,208	Nov. 21, 2000	June 24, 1998
	US	6.160.555	Dec. 12, 2000	Nov. 17, 1997
9	US	6,192,478	Feb. 20, 2001	Mar. 2,1998
	US	6,249,606	June 19, 2001	Feb. 19, 1998
10	US	6,323,846	Nov. 27, 2001	Jan. 25, 1999
	US	6,347,290	Feb. 12, 2002	June 24, 1998
11	US	6,421,453	July 16, 2002	May 15, 1998
	US	6,570,557	May 27, 2003	Feb. 10, 2001
12	US US	6,573,883	June 3, 2003 Oct. 14, 2003	June 24, 1998 May 31, 2000
12	US	6,633,310 6,677,932	Jan. 13, 2004	, - ,
13	US	6,720,860	Apr. 13, 2004	Jan. 28, 2001 June 30, 2000
14	US	6,735,695	May 11, 2004	Dec. 20, 1999
14	US	7,124,433	Oct. 17, 2004	Dec. 10, 2002
15	US	7,124,433	Dec. 19, 2006	Jan. 25, 2005
15	US	7,174,462	Feb. 6, 2007	Nov. 12, 2002
16	US	7,245,293	July 17, 2007	July 28, 2005
	US	7,263,670	Aug. 28, 2007	June 10, 2004
17	US	7,302,642	Nov. 27, 2007	June 3, 2003
	US	8,095,879	Jan. 10,2012	Dec. 10, 2002
18	US	2001/0011308	Aug. 2, 2001	May 20, 1997
	US	2001/0012022	Aug. 9, 2001	Dec. 10, 1998
19	US	2002/0015024	Feb. 7, 2002	Jan. 25, 1999
20	US	2002/0191029	Dec. 19, 2002	May 16, 2001
20	US	2002/0196274	Dec. 26, 2002	June 8, 2001
21	US	2003/0142138	July 31, 2003	Jan. 28, 2002
21	US	2004/0030934	Feb. 12, 2004	Oct. 19, 2000
22	US	2004/0034801	Feb. 19, 2004	Aug. 5, 2003
	US	2004/0085351	May 6, 2004	Sep. 19, 2003
23	US	2004/0088568	May 6, 2004	Sep. 29, 2003
	US	2004/0230843	Nov. 18, 2004	July 8, 2004
24	US	2004/0250138	Dec. 9, 2004	Apr. 18, 2003
	US	2004/0260955	Dec. 23, 2004	June 18,2004
25	US	2004/0268267	Dec. 30, 2004	June 25, 2003
2.	US	2005/0050477	Mar. 3, 2005	July 19, 2000
26	US	2005/0060554	Mar. 17, 2005	Aug. 30, 2004
27	US	2005/0079896	Apr. 14, 2005	Oct. 14, 2003
27	US	2005/0134578	June 23, 2005	July 13, 2001
28	US	2005/0212760	Sep. 29, 2005	Mar. 23, 2004
۷٥	US	2005/0216862	Sep. 29, 2005	Mar. 18, 2005

-67- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

1	Country of Origin	Patent Number	Date of Issue	Priority Date
2	US	2005/0248542	Nov. 10, 2005	Apr. 29, 2005
	US	2005/0253817	Nov. 17, 2005	June 16,2 003
3	US	2005/0264833	Dec. 1, 2005	Mar. 7, 2005
	US	2005/0289476	Dec. 29, 2005	June 28, 2004
4	US	2006/0174339	Aug. 3, 2006	Oct. 5, 2005
_	US	2006/0267955	Nov. 30, 2006	Mar. 6, 2006
5	US	2008/0034292	Feb. 7, 2008	Aug. 4, 2006
	US	2008/0072172	Mar. 20, 2008	Mar. 18, 2005
6	US	5,923,908	July 13, 1999	Oct. 30, 1997
7	US	5,943,052	Aug. 24, 1999	Aug. 12, 1997
′	US	6,298,146	Oct. 2, 2001	June 19, 1997
8	US	6,313,853	Nov. 6, 2001	Apr. 16, 1998
8	US	6,351,634	Feb. 26, 2002	June 1, 1999
9	US	6,639,584	Oct. 28, 2003	July 6, 1999
	US	6,985,137	Jan. 10, 2006	Aug. 13, 2001
10	US	7,031,756	Apr. 18, 2006	Mar. 20, 2000
	US	7,453,443	Nov. 18, 2008	June 16, 2003
11	US	2004/0010722	Jan. 15, 2004	Dec. 23, 2002
	US	2005/0134578	June 23, 2005	Nov. 6, 2002
12	US	2006/0103633	May 18, 2006	Feb. 14, 2005
	US	5,821,933	Oct. 13, 1998	Sep. 14, 1995
13	US	2002/0191029	Dec. 19, 2002	May 16, 2001
	US	2002/0104005	Aug. 1, 2002	Jan. 31, 2001
14	US	2005/0253817	Nov. 17, 2005	June 16, 2003
	WO	2004/001560	Dec. 31, 2003	June 19, 2002
15	WO	2004/111816	Dec. 23, 2004	June 13, 2003

## 2. **Publications**<sup>13</sup>

<u>Title</u>	Date of Publication	Author	Publisher
IBM Research Report – A Wristwatch-Computer Based Password-Vault	Mar. 10, 2005	Gabor Blasko	IBM
Passdoodles; a Lightweight Authentication Method	July 27, 2004	Christopher Varenhorst	
Neonode announces WLAN Mobile Phone	Apr. 12, 2005	Luigi Lugmayr	14U News
Neonode N1 sells for \$620	Nov. 1, 2004	Luigi Lugmayr	14U News
Neonode N1 Sells now Europe-Wide	Nov. 16, 2004	Luigi Lugmayr	14U News
Neonode N1 Smartphone starts selling	Oct. 29, 2004	Luigi Lugmayr	14U News
Neonode Smartphone goes Skateboardering	Sep. 3, 2004	Luigi Lugmayr	14U News
New Neonode N1m	Apr. 7, 2005	Luigi Lugmayr	14U News
New Ultra-Mobile Smartphone Neonode N1	Dec. 21, 2002	Luigi Lugmayr	14U News

<sup>&</sup>lt;sup>13</sup> Samsung incorporates by reference all prior art references identified in the publications listed herein.

1	<u>Title</u>	Date of Publication	Author	Publisher
2	Sharp will manufacture the new Danger HipTop	July 25, 2004	Luigi Lugmayr	14U News
3	The Neonode NI Smart Phone is Shipping, kinda	June 25, 2004	Luigi Lugmayr	14U News
4	Top 10 Future Technology Stories On I4U	Mar. 19, 2003	Luigi Lugmayr	14U News
5	Neonode launches the N1 in Sweden	Oct. 10, 2004		Neonode
6	Neonode Newsletter #3	Undated	The Crew	Neonode
7	Neonode NI Handset Development Description	Feb. 19, 2003		Neonode
8	Neonode Existence – N1 Factsheet V1.1	2003		Neonode
9	RedNeo Forum	Feb. 3, 2005		RedNeo
10	Neonode launches The N1 In Sweden	Oct. 29, 2004		Neonode
10	Neonode User Guide	Undated		Neonode
11	N1 Quick Start Guide V 0.5 NeoNode N1 - Can a	Undated Undated	Conrad H.	Neonode Pen Computing
12	unique interface put this compelling smart phone on	Ondated	Blickenstorfer	Magazine
13	the map? RedNeo Forum	Jan. 22, 2005		RedNeo
	RedNeo Forum	Sep. 23, 2004		RedNeo
14	The Lemur Owner's Manual	Aug. 1, 2005		JazzMutant
15	Lemur Owner's Manual Version 1.2	2005		JazzMutant
16	Soft Machines: A Philosophy of User-	Dec. 1983	Lloyd H. Nakatani and	
17	Computer Interface Design		John A. Rohrlich	
18	Touchscreen Toggle Switches: Push or Slide? Design issues and usability	Nov. 1990	Catherine Plaisant & Daniel Wallace	University of Maryland
19	study		Damer Wanacc	
20	TOUCHSCREEN TOGGLE DESIGN	May 1992	Catherine Plaisant & Daniel Wallace	
21   22	Specification of Interface Interaction Objects	Sep. 1993	David A. Carr	University of Maryland
23	Kenwood - KVT-911DVD Instruction Manual	2000		Kenwood
24	Kenwood's High-End Triumph	July 22, 2002	Amy Gilroy	TWICE
25	VAIO pocket for Windows	Undated		Sony
26	Sony Plans HOD Music Portables In U.S.	May 17, 2004	Joseph Palenchar	TWICE
27	Apple-Samsung Dutch Decision	Aug. 24, 2011		
28	Digital Photo Browsing with Souvenirs	2003	Elise van den Hoven & Berry	IOS Press

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<u>Title</u>	Date of Publication	Author	Publisher
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IBM - Access/Control Icons (Icon Keys)	Apr. 4, 1995	J. McLean, C. A. Pickover and D. Winarski	IBM
The design and Analysis of Graphical Passwords	Aug. 1999	Ian Jermyn, Alain Mayer, Fabian Monrose, Michael K. Reiter, and Aviel D. Rubin	USENIX
Motion Gestures	2005		Apple
Motion Getting Started Manual	2004		Apple
Contact Area Interaction with Sliding Widgets	Undated	Tomer Moscovich	
Scheduling home control devices: design issues and usability evaluation of four touchscreen interfaces	1992	Catherine Plaisant and Ben Shneiderman	University of Maryland
SMART Board Software Version 8.1.3 Introduces Touch Gestures	Aug. 10, 2004		Smart Technologies
Touch-Sensing Input Devices	1999	Ken Hinckley and Mike Sinclair	
Layered Touch Panel: The Input Device with Two Touch Panel Layers	Apr. 2002		

#### 3. **Systems**

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '721 Patent, including documents and source code describing the same:

- Plaisant
- Gridlock
- Neonode.

Samsung reserves the right to amend these invalidity contentions to assert these references depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other

references to render the claims of the '721 Patent obvious in the event Apple takes the position that certain claim limitations are missing from the references charted in Exhibit F.

#### B. Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders Obvious the Asserted Claims

Plaintiff asserts claims 1-15 of the '721 Patent against Samsung in this lawsuit. All of those claims are invalid because the '721 Patent fails to meet one or more of the requirements for patentability. The individual bases for invalidity are provided below and in the claim charts attached as Exhibit F. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '721 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit F, which identify specific examples of where each limitation of the asserted

claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit F, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '721 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit F, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '721 Patent to combine the various references cited herein so as to practice the asserted claims of the '721 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or

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the nature of the problems allegedly addressed by the '721 Patent. Combining the references disclosed in Exhibit F would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits F 1-6, which includes exemplary claim charts for the asserted claims of the '721 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '721 Patent would have been obvious in view of the prior art references identified above. For example, Exhibit F includes exemplary claim charts that describe how the asserted claims of the '721 Patent would have been obvious in view of all references identified in Exhibit F, which, if found not to anticipate the claims of the '721 Patent, render the claims of the '721 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff,

information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

# C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function is attached in Exhibits F 1-6.

## D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '721 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

#### 1. Invalidity Based on 35 U.S.C. § 101

The asserted claims of the '721 Patent are invalid under 35 U.S.C. § 101 because they only claim abstract ideas. Many limitations in the asserted claims are common abstractions in computer systems and programming languages. For example, "detecting a contact with the touch-sensitive display at a first predefined location corresponding to an unlock image," "continuously moving the unlock image on the touch-sensitive display in accordance with movement of the contact while continuous contact with the touch screen is maintained," "unlocking the hand-held electronic device if the moving the unlock image on the touch-sensitive display results in movement of the unlock image from the first predefined location to a predefined unlock region on the touch-sensitive display," "moving comprises movement along any desired path," "moving

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comprises movement along any desired path," "displaying visual cues to communicate a direction of movement of the unlock image required to unlock the device," "an arrow indicating a general direction of movement," each refer only to programming abstractions, the manipulation of information, or abstract ideas regarding user interaction; these are concepts, not physical objects or tangible matter.

2. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '721 Patent is invalid in that the '721 specification fails to particularly point out and distinctly claim the alleged invention of the '721 Patent. Samsung further asserts that each asserted claim of the '721 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Plaintiff's infringement contentions,

Samsung asserts that claim 1-15 of the '721 Patent are invalid under 35 U.S.C. § 112 ¶ 1 at least
because they include the following claim terms/phrases:

- "A method for unlocking a handheld device,"
- "continuously moving the unlock image on the touch-sensitive display in
  accordance with movement of the contact while continuous contact with the touch
  screen is maintained, wherein the unlock image is a graphical, interactive userinterface object with which a user interacts in order to unlock the device,"
- "unlocking the hand-held electronic device if the moving the unlock image on the touch-sensitive display results in movement of the unlock image from the first predefined location to a predefined unlock region on the touch-sensitive display,"
- "moving comprises movement along any desired path,"
- "moving comprises movement along any desired path,"

- "displaying visual cues to communicate a direction of movement of the unlock image required to unlock the device,"
- "an arrow indicating a general direction of movement."

These claim terms/phrases as apparently construed by Apple violate the written description and/or enablement requirements of 35 U.S.C.  $\S 112 \P 1$ .

Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification. Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear lack written description because the specification of the '721 Patent demonstrates that the patentee neither conceived of nor demonstrated possession of all that Apple now contends the claims cover. In addition, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear are invalid because the specification fails to provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains, or with which it is most nearly connected, to implement the invention without undue experimentation. Therefore, the claims fail to satisfy the requirements of § 112 ¶¶ 1 and 2.

Samsung further asserts that claims 11, 7, 8, 9, 10, 12, 14, 15 of the '721 Patent are invalid for reciting at least the following claim limitations:

- "means for displaying an unlock image at a first predefined location on the touchsensitive display while the device is in a user-interface lock state";
- "means for continuously moving the unlock image on the touch-sensitive display in response to detecting the contact in accordance with movement of the contact while continuous contact with the touch screen is maintained, wherein the unlock image

is a graphical, interactive user-interface object with which a user interacts in order to unlock the device";

- "means for transitioning the device to a user-interface unlock state if the moving the unlock image on the touch-sensitive display results in movement of the unlock image from the first predefined location to a predefined unlock region on the touchsensitive display";
- "including instructions... to detect a contact with the touch-sensitive display at a first predefined location corresponding to an unlock image";
- "including instructions.... to continuously move the unlock image on the touchsensitive display in accordance with movement of the detected contact while
  continuous contact with the touch-sensitive display is maintained, wherein the
  unlock image is a graphical, interactive user-interface object with which a user
  interacts in order to unlock the device"; and
- "including instructions... to unlock the hand-held electronic device if the unlock image is moved from the first predefined location on the touch screen to a predefined unlock region on the touch-sensitive display";
- "A computer readable storage medium storing one or more programs, the one or more programs comprising instructions.... comprising... detecting... continuously moving.... and unlocking."

Each of those claim limitations is or may be governed by 35 U.S.C. section 112, paragraph 6. The '721 patent specification, however, fails to set forth the structure, material or acts for accomplishing the recited function. Each of these claims is therefore invalid as indefinite under 35 U.S.C. § 112(2).

#### VII. THE '172 PATENT

#### A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '172 Patent:

## 1. Patent References<sup>14</sup>

Country of Origin	Patent Number	Date of Issue	Priority Date
US	5,367,453	Nov. 22, 1994	Aug. 2, 1993
US	5,437,036	July 25, 1995	Sep. 3, 1992
US	5,487,616	Jan. 30, 1996	June 1, 1995
US	5,594,640	July 25, 1995	Aug. 2, 1993
US	5,623,406	Apr. 22, 1997	Mar. 6, 1995
US	5,682,439	Oct. 28, 1997	Aug. 7, 1995
US	5,818,437	Oct. 6, 1998	July 26, 1995
US	5,953,541	Sep. 14, 1999	Jan. 24, 1997
US	6,002,390	Dec. 14, 1999	Nov. 21, 1997
US	6,085,206	July 4, 2000	June 20, 1996
US	6,204,848	Mar. 20, 2001	Apr. 14, 1999
US	6,307,548	Oct. 23, 2001	Sep. 25, 1997
US	6,377,965	Apr. 23, 2002	Nov. 7, 1997
US	6,405,060	June 11, 2002	Dec. 19, 1997
US	6,556,841	Apr. 29, 2003	May 3, 1999
US	6,583,798	June 24, 2003	July 21, 2000
US	6,724,370	Apr. 20, 2004	Apr. 12, 2001
US	6,801,190	Oct. 5, 2004	May 27, 1999
US	6,801,659	Oct. 5, 2004	Jan. 4, 1999
US	6,822,585	Nov. 23, 2004	Sep. 15, 2000
US	6,836,759	Dec. 28, 2004	Aug. 22, 2000
US	6,920,452	July 19, 2005	Apr. 26, 2001
US	7,030,863	Apr. 18, 2006	July 16, 2003
US	7,088,345	Aug. 8, 2006	May 27, 1999
US	7,091,885	Aug. 15, 2006	June 2, 2004
US	7,098,896	Aug. 29, 2006	Jan. 16, 2003
US	7,119,794	Oct. 10, 2006	Apr. 30, 2003
US	7,130,798	Oct. 31, 2006	Aug. 22, 2000
US	7,202,853	Apr. 10, 2007	Mar. 4, 2003
US	7,277,088	Oct. 2, 2007	Feb. 4, 2004
US	7,293,231	Nov. 6, 2007	Mar. 18, 1999
US	7,296,019	Nov. 13, 2007	Oct. 23, 2001
US	7,403,888	July 22, 2008	June 28, 2000
US	7,443,316	Oct. 28, 2008	Sep. 1, 2005
US	7,486,277	Feb. 3, 2009	Apr. 30, 2003
US	7,581,180	Aug. 25, 2009	May 10, 2001
US	7,584,093	Sep. 1, 2009	Apr. 25, 2005
US	7,584,426	Sep. 1, 2009	Mar. 31, 2004

Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

**Date of Issue** 

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US	7,599,828	Oct. 6, 2009	Mar. 1, 2005
US	7,636,083	Dec. 22, 2009	Feb. 20, 2004
US	7,698,123	Apr. 13, 2010	Aug. 31, 2004
US	7,716,579	May 11, 2010	May 19, 2005
US	7,725,419	May 25, 2010	Sep. 3, 2003
US	7,880,730	Feb. 1, 2011	Feb. 9, 2004
US	7,886,233	Feb. 8, 2011	May 23, 2005
US	7,920,132	Apr. 5, 2011	May 27, 1999
US	7,996,589	Aug. 9, 2011	Apr. 22, 2005
US	8,036,878	Oct. 11, 2011	May 18, 2005
US	8,136,050	Mar. 13, 2012	Nov. 21, 2003
US	8,185,841	May 22, 2012	May 23, 2005
US	2003/0033288	Feb. 13, 2003	Aug. 13, 2001
US	2004/0021691	Feb. 5, 2004	May 21, 2001
US	2004/0140956	July 22, 2004	Jan. 16, 2003
US	2004/0183833	Sep. 23, 2004	Mar. 19, 2003
US	2005/0188330	Aug. 25, 2005	Feb. 20, 2004
US	2005/0192802	Sep. 1, 2005	Feb. 11, 2004
US	2005/0283358	Dec. 22, 2005	Aug. 26, 2005
US	2006/0063558	Mar. 23, 2006	Sep. 21, 2004
US	2006/0142997	June 29, 2006	Dec. 27, 2002
US	2006/0149551	July 6, 2006	Dec. 22, 2004
US	2006/0167676	July 27, 2006	Jan. 26, 2005
US	2006/0176283	Aug. 10, 2006	Aug. 6, 2004
US	2006/0190447	Aug. 24, 2006	Feb. 22, 2005
US	2006/0206815	Sep. 14, 2006	Mar. 8, 2005
US	2006/0206816	Sep. 14, 2006	Mar. 11, 2005
US	2006/0274051	Dec. 7, 2006	Jan. 12, 2004
US	2006/0269138	Nov. 30, 2006	Aug. 22, 2000
US	2007/0016862	Jan. 18, 2007	July 15, 2005
US	2007/0061753	Mar. 15, 2007	June 30, 2004
US	2007/0074131	Mar. 29, 2007	May 18, 2005
US	2008/0266263	Oct. 30, 2008	Mar. 23, 2006
US	2009/0019395	Jan. 15, 2009	Nov. 22, 2004
US	2011/0010655	Jan. 13, 2011	May 21, 2001
JP	2001-325062	Nov. 22, 2001	May 17, 2000
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#### Publications<sup>15</sup> 2.

Title	Date of Publication	Author	Publisher
A Minimal Device- Independent Text Input Method	Nov. 10, 1999	Poika Isokoski	University of Tampere
A Stylus-Based User Interface for Text: Entry and Editing	June 1991	Aaron Goodisman	Massachusetts Institute of Technology
Adaptive Forms: An	1998	Martin Frank	Association for

Samsung incorporates by reference all prior art references identified in the publications listed herein.

**Priority Date** 

1	Title	Date of Publication	Author	Publisher
2	Interaction Paradigm for Entering Structured Data		and Pedro Szekely	Computing Machinery
3	An Efficient Text Input Method for Pen-based	Apr. 1998	Toshiyuki Masui	Association for Computing
4	Computers Embedded Menus: Selecting	Apr. 1986	Larry Koved	Machinery Association for
5	Items In Context	трг. 1900	and Ben Schneiderman	Computing Machinery
6	Empirically-based Re-	Apr. 1993	Keith Instone, Barbee Mynatt	Association for
7	design of a Hypertext Encyclopedia		Teasley, and Laura Leventhal	Computing Machinery
8	FitalyStamp User's Manual	Aug. 12, 2004		TextWare Solutions
9	FitalyVirtual User's Manual	Jan. 4, 2005		TextWare Solutions
10 11	From Letters to Words: Efficient Stroke-based Word Completion for Trackball Text Entry	Oct. 2006	Jacob Wobbrock and Brad Myers	Association for Computing Machinery
12	Handbook for Palm <sup>TM</sup> Tungsten <sup>TM</sup> T Handhelds	2002		Palm
13	Instant Text Mobile User's Manual	May 13, 2005		TextWare Solutions
14	Instant Text Mobile Options and Advanced Features	Aug. 16, 2005		TextWare Solutions
15 16	Integrating Pen Operations for Composition by Example	1998	Toshiyuki Masui	Association for Computing Machinery
17	Mobile Text Entry	Nov. 8, 2002	Amal Sirisena	University of Canterbury
18	Model-based and Empirical Evaluation of Multimodal Interactive Error Correction	1999	Bernhard Suhm, Brad Myers, and Alex Waibel	Association for Computing Machinery
19	Motorola V3 GSM User Guide	2005	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Motorola
20 21	Natural Language Interfaces: Specifying and	1993	Elisabeth Godbert, Robert	Elsevier
22	Using Conceptual Constraints		Pasero, and Paul Sabatier	
23	POBox: An Efficient Text Input Method for Handheld and Ubiquitous Computers	1999	Toshiyuki Masui	Springer-Verlag
24	Read This First – Welcome to Instant Text Mobile	Apr. 9, 2005		TextWare Solutions
25	Read This First – Welcome to FitalyStamp	Aug. 5, 2004		TextWare Solutions
26	Read This First – Welcome to Fitaly Virtual	July 29, 2005		TextWare Solutions
27	Syntax PAL: A System to Improve the Written Syntax	1992	Corinne Morris, Alan Newell,	Rehabilitation Engineering and
28	of Language-Impaired Users		Lynda Booth,	Assistive

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Title	Date of Publication	Author	Publisher
		Ian Ricketts and John Arnott	Technology Society
Text Entry for Mobile Computing: Models and Methods, Theory and Practice	2002	I. Scott MacKenzie and R. William Soukoreff	Lawrence Erlbaum Associates
Text prediction systems: a survey	2006	Nestor Garay- Vitoria and Julio Abascal	Springer-Verlag
Toshiba Pocket PC e570 Instruction Manual	Sep. 2001		Toshiba
TextPlus <sup>TM</sup> for the Palm OS Version 5.5 Users Guide	Aug. 31, 2004		TextWare Solutions
The Fitaly Keyboard for the Palm Organizer: Reference Manual	Jan. 20, 2000		TextWare Solutions
Treo <sup>TM</sup> 90 Handheld User Guide	2002		Handspring
WiViK On-screen Keyboard	2003		Prentke Romich Company

#### 3. **Systems**

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '172 Patent, including documents and source code describing the same:

- eZiTap, eZiText, and eZiType
- Fitaly 3 for the Pocket PC
- FitalyStamp 3
- FitalyVirtual 3
- Interkey Professional
- Instant Text Mobile for the Palm OS5
- LookDA 3.5
- Mac OS X Autocomplete
- Spell Catcher X
  - T-Mobile Dash
  - TenGO 2.0
  - TenGO Palm 1.0

- TenGO Thumb 1.04
- TextPlus 3.0
- TextPlus for the Palm OS Version 5.5
- The Fitaly Keyboard for the Palm Organizer 2.0
- WiViK 3 On-Screen Keyboard
- WordComplete 2.0

Samsung reserves the right to amend these invalidity contentions to assert these references depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other references to render the claims of the '172 Patent obvious in the event Apple takes the position that certain claim limitations are missing from the references charted in Exhibit G.

# B. Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders Obvious the Asserted Claims

Plaintiff asserts claims 2-6, 9-12, 17-21, 23-25 and 27-37 of the '172 Patent against Samsung in this lawsuit. All of those claims are invalid because the '172 Patent fails to meet one or more of the requirements for patentability. The individual bases for invalidity are provided below and in the claim charts attached as Exhibit G. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other

publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '172 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit G, which identify specific examples of where each limitation of the asserted claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

#### 2. **Obviousness**

To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit G, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would, therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '172 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit G, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '172 Patent to combine the various references cited herein so as to practice the asserted claims of the '172 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or the nature of the problems allegedly addressed by the '172 Patent. Combining the references disclosed in Exhibit G would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits G-1 to G-11, which includes exemplary claim charts for the asserted claims of the '172 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '172 Patent would have been obvious in view of the prior art references identified above. For example, Exhibit G includes exemplary claim charts that describe how the asserted claims of the '172 Patent would have been obvious in view of all references identified in Exhibit G, which, if found not to anticipate the claims of the '172 Patent, render the claims of the '172 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff, information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

# C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function is attached in Exhibits G-1 to G-11.

### D. Local Patent Rule 3-3(d): Other Grounds for Invalidity

Samsung identifies the following grounds for invalidity of the asserted claims of the '172 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

#### 1. Invalidity Based on 35 U.S.C. § 101

The asserted claims of the '172 Patent are invalid under 35 U.S.C. § 101 because they only claim abstract ideas. Many limitations in the asserted claims are common abstractions in computer systems and programming languages. For example, "displaying a current character string", "displaying the current character string or a portion thereof and a suggested replacement character string", "displaying a suggested replacement character string", "displaying an alternative suggested replacement character string", "replacing the current character string", "replacing the current character string in the first area is replaced", "the current character string in the first area is kept", "appending a punctuation mark", "the suggested replacement character string in combination with a punctuation a first punctuation mark", "the suggested replacement character string in combination with a second punctuation mark", "adding at the end of said character set a punctuation mark" each refer only to programming abstractions or the manipulation of information; these are concepts, not physical objects or tangible matter.

# 2. Invalidity Based on Enablement or Written Description Under 35 U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '172 Patent is invalid in that the '172 specification fails to particularly point out and distinctly claim the alleged invention of the '172 Patent. Samsung further asserts that each asserted claim of the '172 Patent is invalid as not containing a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Apple's infringement contentions, Samsung asserts that claims 18, 19, 20, 27, 28, 32, 33 of the '172 Patent are invalid as indefinite because they combine method and apparatus limitations. Samsung further asserts that claims 2-3, 6, 9, 18-21, 23-25 and 27-37 of the '172 Patent are invalid as indefinite for reciting at least the following claim terms/phrases:

"current character string" / "current character set"

- "being input by a user with a keyboard"
- "replacing the current character string" / "the current character string in the first area is replaced"
- "key on the keyboard associated with a delimiter"
- "keeping the current character string" / "the current character string in the first area is kept"
- "performs a first gesture on the suggested replacement character string"
- "performs a second gesture in the second area on the current character string or the portion thereof"
- "soft keyboard" / "virtual keyboard" / "virtual key" / "virtual . . . key"
- "performs a predefined gesture on the alternative suggested replacement character string in the second area"
- "performs a gesture on the suggested replacement character string"
- "performs a gesture in the second area on the current character string or the portion thereof"
- "user input of a single touch" / "single touch input" / "single touch user selection input"
- "single user input at a first location / single user input at a second location / single user input at a third location"
- "in response to . . . user input" / "in response to the single touch user selection input"
- "accepting the current character string"

These claim terms/phrases as apparently construed by Apple violate the written description, enablement, and/or definiteness requirements of 35 U.S.C. § 112.

Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification. Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each

#### VIII. THE '604 PATENT

#### A. Local Patent Rule 3-3(a): Identification of Prior Art

At this time, Samsung contends that at least the following prior art references anticipate or render obvious, either alone or in combination, the asserted claims of the '604 Patent:

## 1. Patent References<sup>16</sup>

Country of Origin	Patent Number	Date of Issue	Priority Date
US	3,496,299	Feb. 17, 1970	Nov. 14, 1966
US	4,260,854	Apr. 7, 1981	May 20, 1975
US	5,019,806	May 28, 1991	Apr. 30, 1984
US	5,337,347	Aug. 9, 1994	June 25, 1992
US	5,577,241	Nov. 19, 1996	Dec. 7,1994
US	5,634,053	May 27, 1997	Aug. 29, 1995
US	5,659,732	Aug. 19, 1997	May 17, 1995
US	5,671,426	Sep. 23, 1997	June 22, 1993
US	5,742,816	Apr. 21, 1998	Sep. 15, 1995
US	5,845,278	Dec. 1, 1998	Sep. 12, 1997
US	5,855,015	Dec. 29, 1998	May 12, 1995
US	5,913,205	June 15, 1999	Mar. 28, 1996
US	5,913,215	June 15, 1999	Feb. 19, 1997
US	5,937,406	Aug. 10, 1999	Jan. 31, 1997
US	5,987,446	Nov. 16, 1999	Nov. 12, 1996
US	6,000,020	Dec. 7, 1999	Apr. 1, 1997
US	6,005,565	Dec. 21, 1999	Mar. 25, 1997
US	6,026,429	Feb. 15, 2000	Nov. 10, 1997
US	6,049,796	Apr. 11, 2000	Feb. 24, 1997
US	6,065,003	May 16, 2000	Aug. 19, 1997
US	6,070,158	May 30, 2000	Aug. 14, 1996
US	6,078,914	June 20, 2000	Dec. 9, 1996
US	6,098,065	Aug. 1, 2000	Feb. 13, 1997
US	6,266,094	July 24, 2001	June 14, 1999
US	6,311,182	Oct. 30, 2001	Nov. 17, 1997
US	6,324,534	Nov. 27, 2001	Sep. 10, 1999
US	6,345,269	Feb. 2, 2002	Mar. 26, 1999
US	6,366,915	Apr. 2, 2002	Nov. 4, 1998
US	6,370,543	Apr. 9, 2002	May 24, 1996
US	6,415,285	July 2, 2002	Dec. 8, 1999
US	6,424,968	July 23, 2002	Oct. 15, 1998
US	6,445,834	Sep. 3, 2002	Oct. 19, 1998
US	6,574,632	June 3, 2003	Nov. 18, 1998
US	6,578,048	June 10, 2003	June 5, 1995
US	6,615,172	Sep. 2, 2003	Nov. 12, 1999
US	6,665,640	Dec. 16, 2003	Nov. 12, 1999
US	6,697,835	Feb. 24, 2004	Oct. 28, 1999
US	6,842,758	Jan. 11, 2005	July 30, 1999

Samsung incorporates by reference all prior art references cited in the patents listed herein and/or their file histories.

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Country of Origin	Patent Number	Date of Issue	Priority Date
US	6,845,370	Jan. 18, 2005	Nov. 19, 1998
US	6,862,713	Mar. 1, 2005	Aug. 31, 1999
US	6,901,366	May 31, 2005	Aug. 26, 1999
US	7,653,614	Jan. 26, 2010	July 15, 1999
US	7,873,995	Jan. 18, 2011	Sep. 29,2 003
EP	0706139	Published Apr. 10, 1996	Sep. 9, 1994
WO	98/32289	Published July 23, 1998	Jan. 17, 1997

## 2. **Publications**<sup>17</sup>

Title	Date of Publication	Author	Publisher
An Information System Based on Distributed Objects	1987	Michael Caplinger	Computing Machinery
An Information System for Corporate Users: Wide Area Information Servers	Sep. 1991	Brewster Kahle and Art Medler	Online
Annotating the World Wide Web using Natural Language	1997	Boris Katz	
ARIADNE: A System for Constructing Mediators for Internet Sources	1998	Jose Luis Ambite, Naveen Ashish, Greg Barish, Craig A. Knoblock, Steven Minton, Pragnesh J. Modi, Ion Muslea, Andrew Philpot and Sheila Tejada	SIGMOD
Browsing Local and Global Information	1995	Masum Hasan, Gene Golovchinsky , Emanuel Noik, Nipon Charoenkitkar n, Mark Chignell, Alberto Mendelzon and David Modjeska	Proceedings of the 1995 conference of the Centre for Advanced Studies on Collaborative Research
Building the infrastructure of	Jan. 1, 1997	Lynch,	Library Trends

<sup>&</sup>lt;sup>17</sup> Samsung incorporates by reference all prior art references identified in the publications listed herein.

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Title	Date of Publication	Author	Publisher
resource sharing: union	1 ublication	Clifford	
catalogs, distributed search, and		Cintoru	
cross-database linkage			
The Computer User as	1993	Saul	
Toolsmith		Greenberg	
CyberDesk: A Framework for	1997	Anind K.	
Providing Self-Integrating		Dey, Gregory	
Ubiquitous Software Services		Abowd, Mike	
		Pinkerton and	
		Andrew	
D	G 01 1000	Wood	DD M
Dataware Technologies	Sep. 21, 1998		PR Newswire
Introduces Dataware II			
Knowledge Ouery Server		Mark A.	
Discover: A Resource Discovery System based on		Sheldon,	
Content Routing		Andrzej	
Content Routing		Duda, Ron	
		Weiss, David	
		K. Gifford	
The Distributed Information	1997	Anthony	SIGMOD
Search Component (Disco) and		Tomasic,	
the World Wide Web		Remy	
		Amouroux,	
		Philippe	
		Bonnet, Olga	
		Kapitskaia,	
		Hubert	
		Naacke,	
		Louiqa Raschid	
Doctor Linux – 5 <sup>th</sup> Edition	1997	John Purcell,	Linux Systems
Doctor Linux – 3 Edition	1991	ed.	Linux Systems
The Effectiveness of GlOSS for		Luis Gravano,	
the Text Database Discovery		Hector	
Problem		Garcia-	
		Molina and	
		Anthony	
		Tomasic	
Emacs tutorial	1985		Free Software
<b>D</b>			Foundation
Experience the Internet's most			The WebTools
powerful search tool	1000		Company
Exploring Computer Science	1998		Spinger-Verlag
with Scheme FreeWAIS-sf: A Wide Area			New York, Inc.
Information Server for			
Structured Documents and			
Retrieval Functionality			
FreeWAIS-sf	Mar. 30, 1995	Ulrich Pfeifer	University of
1100 1111110 01	1,141. 50, 1775	Tung Huynh	Dortmund
freeWAIS-sf – UNIDO Edition	Oct. 1995	Ulrich Pfeifer	University of

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Title	Date of	Author	Publisher
Title	Publication Publication	Author	1 ublisher
0.5			Dortmund
GNU Emacs Manual –	Undated		
Searching and Replacement			
GNU Readline Library	1988		Free Software
			Foundation
Hemlock – An Internet Search	1999	Sean Luke	
Tool for the Newton	TT 1 4 1		
Hemlock An Internet Search Tool for the Newton	Undated		
Heuristics – Intelligent Search	1984	Judea Pearl	Addison-
Strategies for Computer	1704	Judea I carr	Wesley
Problem Solving			, restey
How to Create a WAIS Query			
Implementation of the SMART	May 1985	Chris Bucley	
Information Retrieval System	•		
Incremental Searching in	Oct. 1993		PC Magazine
FoxPro		<del> </del>	
The Info Agent: An Interface	1995	Daniela D'	
for Supporting Users in		Aloisi and	
Intelligent Retrieval		Vittorio Giannini	
Infoharness: Managing	1999	Kshitij Shah	IEEE Internet
Distributed, Heterogeneous	1999	and Amit	Computing
Information		Sheth	Computing
Information Retrieval	1998	David A.	Kluwer
Algorithms and Heuristics		Grossman and	Academic
		Ophir Frieder	
Information Retrieval (Z39.50):	1995		NISO Press
Application Service Definition			
and Protocol Specification	1007	Vanlant N	IEEE Intornat
Information Retrieval on the World Wide Web	1997	Venkat N. Gudivada,	IEEE Internet
World Wide Web		Vijay V.	Computing
		Raghavan,	
		William I.	
		Grosky and	
		Rajesh	
		Kasanagottu	
INQUERY System Overview	Undated	John Broglio,	
		James P.	
		Callan and W.	
Laterna & Elel	M 1006	Bruce Croft	
Internet Fish	May 1996	Brian A.	
An Introduction to the EMACS	Jan. 1978	LaMacchia Eugene	MIT
Editor	Jan. 17/0	Ciccarelli	1411 1
An Introduction to Multisensor	1997	David L. Hall	IEEE
Data Fusion		and James	
		Llinas	
Macworld Mac OS 8.5 Bible	1999	Lon Poole	IDG Books
			Worldwide
Mac OS 8.5 – Black Book	1999	Mark R. Bell	The Coriolis

-92- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

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Title	Date of Publication	Author	Publisher
	T WATCHION	and Debrah D. Suggs	Group,
Mac OS 8.5: GO FOR IT! Part I	Oct. 29 1998	Michael Lambert	The Mac Observer
Mac OS 8.5: GO FOR IT! Part II	Oct. 29 1998	Michael Lambert	The Mac Observer
Mac OS 8.5 Special Report	1998		MacInTouch
MAC OS 9: The Missing Manual – Finding Files and Web Sites with Sherlock 2			
MacWAIS Software Version 1.28	Feb. 23, 1994		EINet
The MetaCrawler Architecture for Resource Aggregation on the Web	Nov. 8, 1996	Erik Selberg and Oren Etzioni	
Microsoft Universal Data Access Platform	1998	Jose A. Blakeley, Michael J. Pizzo	SIGMOD
Microsoft Windows 98 Companion	1998	Martin Matthews	Microsoft Press
Modern Heuristic Search Methods	1996	V.J. Rayward- Smith, I.H. Osman, C.R. Reeves and G.D. Smith	John Wiley and Sons
Multiobjective Heuristic Search	1999	Pallab Dasgupta, P.P. Chakrabarti and S.C. Desarkar	Vieweg
NetHopper Version 3.0 – User's Manual	1997		AllPen
Newton Apple MessagePad Handbook	1995		Apple
Newton Solutions Guide			Apple
Newton Programmer's Guide	1996		Addison- Wesley
Northern Light: New Search Engine for the Web and Full- Text Articles	Feb. 1998	Greg Notess	Online
Overview of Wide Area Information Servers	Apr. 1991	Brewster Kahle	
Pen Pals	Oct. 12, 1993	Christopher Barr and Michael Neubarth	PC Magazine
Peter Rand's Review of Hemlock	1999	Peter Rand	
Rama: An Architecture for	May 1, 1991	Jim Binkley	Kluwer

1	Title	Date of Publication	Author	Publisher
2	Internet Information Filtering	1 umaumm	and Leslie Young	
3	Search Algorithms Under Different Kinds of Heuristics –	1983	A. Bagchi and A. Mahanti	Indian Institute of Management
4	A Comparative Study Sigerson, A Sherlock Power	Dec. 2, 1998	James	Calcutta the Mac
5	Booster Sherlock Holmes am	Dec. 1999	Sentman	Observer
6	Newton			77.6.1
7	Softscape's QuickFind Search and Retrieval Software	Nov. 1997	Robert J. Boeri	EMedia Professional
8	Software Quality Engineering – A Total Technical and Management Approach	1988	Michael S. Deutsch and Ronald R.	Prentice-Hall
10	Special Edition – Using Visual C++6	1998	Willis Kate Gregory	Que
11	Surviving the Storm: Using Metasearch Engines Effectively	May 1999	Randal D. Carlson and Judi Repman	Computers in Libraries
12 13	Toward more comprehensive Web searching: single searching versus megasearching	1998	Greg R. Notess	Online
14 15	Unix for the Impatient	1996	Paul W. Abrahams and Bruce A. Larson	Addison- Wesley
16	User's Guide to the Macintosh version of the WAIS interface	1991		Thinking Machines
17	WAIS, A Sketch Of An Overview	Sep. 23, 1991	Jeff Kellem	
18	WAIS Search Help			
19	What is freeWAIS-sf? Wide Area Information Servers (WAIS)	June 1994	M. St. Pierre, J. Fullton, K.	
20			Gamiel, J. Goldman, B. Kahle, J.	
21   22			Kunze, H. Morris and F. Schiettecatte	
23	Windows 98 Annoyances	Oct. 1998	David A.	O'Reilly
24	Windows 98 for Dummies	1999	Andy Rathbone	Wiley
25	WordPerfect for Windows V 5.2	1992		WordPerfect
26	Xerox Delivers Global Competitive Advantage to	Apr. 27, 1999		Business Wire
27	Manufacturing Customers Through Solutions Portfolio			
28	Xerox Introduces Two Products	Nov. 9, 1999		Business Wire

-94- Case No. 12-cv-00630-LHK SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

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Title **Publisher** Date of Author **Publication** to Expand Knowledge Sharing Software Portfolio Xerox unveils "askOnce". 1999 Xerox which brings a new search dimension to end-users by giving universal access to multiple information sources through one simple query The Z39.50 Information Apr. 1997 Clifford A. D-Lib Retrieval Standard – Part I: A Lynch Magazine Strategic View of Its Past, Present and Future

#### 3. **Systems**

All versions of the following prior art systems commercially sold, publicly known or used before the priority date of the '604 Patent, including documents and source code describing the same:

- Emacs
- GNU
- Hemlock
- Linux
- Mac OS 8.5
- Newton 2.0
- NetHopper
- Sherlock Utility
- WAIS protocol and WAIStation client
- Windows 98

Samsung reserves the right to amend these invalidity contentions to assert these references depending on the claim construction and infringement positions Apple may take as the case proceeds. Moreover, Samsung reserves the right to use these references in combination with other references to render the claims of the '604 Patent obvious in the event Apple takes the position that certain claim limitations are missing from the references charted in Exhibit H.

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#### B. Local Patent Rule 3-3(b): Whether Each Item Anticipates or Renders Obvious the Asserted Claims

Plaintiff asserts claims 1, 6, 11 and 16-21 of the '604 Patent against Samsung in this lawsuit. All of those claims are invalid because the '604 Patent fails to meet one or more of the requirements for patentability. The individual bases for invalidity are provided below and in the claim charts attached as Exhibit H-1 through H-9. Each of the foregoing listed prior art documents, the underlying work, and/or the underlying apparatus or method qualifies as prior art under one or more sections of 35 U.S.C. § 102 and/or 35 U.S.C. § 103.

Although Samsung has identified at least one citation per limitation for each reference, each and every disclosure of the same limitation in the same reference is not necessarily identified. Rather, in an effort to focus the issues, Samsung has generally cited representative portions of identified references, even where a reference may contain additional support for a particular claim element. In addition, persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Thus, to understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their general scientific knowledge. Samsung may rely upon uncited portions of the prior art references and on other publications and expert testimony to provide context, and as aids to understanding and interpreting the portions that are cited. Samsung may also rely on uncited portions of the prior art references, other disclosed publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious.

#### 1. **Anticipation**

Some or all of the asserted claims of the '604 Patent are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references identified above and in the claim charts included in Exhibit H, which identify specific examples of where each limitation of the asserted claims is found in the prior art references. As explained above, the cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the

## content and teaching of the prior art references, and should be understood in the context of the reference as a whole and as they would be understood by a person of ordinary skill in the art.

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#### 2. **Obviousness**

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To the extent any limitation is deemed not to be exactly met by an item of prior art listed above and in Exhibit H, then any purported differences are such that the claimed subject matter as a whole would have been obvious to one skilled in the art at the time of the alleged invention, in view of the state of the art and knowledge of those skilled in the art. The item of prior art would,

therefore, render the relevant claims invalid for obviousness under 35 U.S.C. § 103(a).

In addition, the references identified above render one or more asserted claims of the '604 Patent obvious when the references are read in combination with each other, and/or when read in view of the state of the art and knowledge of those skilled in the art. Each and every reference identified is also relevant to the state of the art at the time of the alleged invention. Any of the references disclosed above may be combined to render obvious (and therefore invalid) each of Plaintiff's asserted claims. Samsung may rely upon a subset of the above identified references or all of the references identified above, including all references in Exhibit H, for purposes of obviousness depending on the Court's claim construction, positions taken by Apple during this litigation, and further investigation and discovery.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to P.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the '604 Patent to combine the various references cited herein so as to practice the asserted claims of the '604 Patent.

Motivations to combine the above items of prior art are present in the references themselves, the common knowledge of one of ordinary skill in the art, the prior art as a whole, or the nature of the problems allegedly addressed by the '604 Patent. Combining the references

disclosed in Exhibit G would have been obvious, as the references identify and address the same technical issues and suggest very similar solutions to those issues. Samsung reserves the right to amend or supplement these invalidity contentions to identify additional reasons that combining the references would be obvious to one of ordinary skill in the art.

In accordance with P.R. 3-3(b), prior art references rendering the asserted claims obvious, alone or in combination with other references, including identification of combinations showing obviousness, are identified in Exhibits H-1 through H-9, which includes exemplary claim charts for the asserted claims of the '604 Patent showing specifically where in each reference or combinations of references each asserted claim is found, and an explanation of why the prior art renders the asserted claim obvious.

In particular, Samsung contends that the asserted claims of the '604 Patent would have been obvious in view of the prior art references identified above. For example, Exhibit H includes exemplary claim charts that describe how the asserted claims of the '604 Patent would have been obvious in view of all references identified in Exhibit H, which, if found not to anticipate the claims of the '604 Patent, render the claims of the '604 Patent obvious alone.

In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Samsung reserves the right to rely on any other combination of any prior art references disclosed herein. Samsung further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein.

The obviousness combinations set forth in these contentions reflect Samsung's present understanding of the potential scope of the claims that Plaintiff appears to be advocating and should not be seen as Samsung's acquiescence to Plaintiff's interpretation of the patent claims.

Samsung also reserves the right to amend or supplement these contentions regarding anticipation or obviousness of the asserted claims, in view of further information from Plaintiff, information discovered during discovery, or a claim construction ruling by the Court. Plaintiff has

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not identified what elements or combinations it alleges were not known to one of ordinary skill in the art at the time. Therefore, for any claim limitation that Plaintiff alleges is not disclosed in a particular prior art reference, Samsung reserves the right to assert that any such limitation is either inherent in the disclosed reference or obvious to one of ordinary skill in the art at the time in light of the same, or that the limitation is disclosed in another of the references disclosed above and in combination would have rendered the asserted claim obvious.

#### C. Local Patent Rule 3-3(c): Charts Identifying where Specifically in each Alleged item of Prior Art each Asserted Claim is Found

Pursuant to Local Patent Rule 3-3(c), charts identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found, including for each limitation that Samsung contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function are attached in Exhibits H-1 through H-9.

#### **Local Patent Rule 3-3(d): Other Grounds for Invalidity** D.

Samsung identifies the following grounds for invalidity of the asserted claims of the '604 Patent based on 35 U.S.C. §§ 101 and/or 112 ¶¶ 1 and 2. Samsung reserves the right to supplement these disclosures based on further investigation and discovery.

#### 1. **Invalidity Based on 35 U.S.C. § 101**

The asserted claims of the '604 Patent are invalid under 35 U.S.C. § 101 because they claim only abstract ideas. For example, "providing said information received from the user-input device to a plurality of heuristic modules," and "determining at least one candidate item of information," "searching by the heuristic modules," and "providing at least one candidate item of information" each refer only to programming abstractions or the manipulation of information; these are concepts, not physical objects or tangible matter.

#### 2. **Invalidity Based on Enablement or Written Description Under 35** U.S.C. § 112(1) and/or Invalidity Based on Indefiniteness Under 35 U.S.C. § 112(2)

Samsung asserts that each asserted claim of the '604 Patent is invalid in that the '604 specification fails to particularly point out and distinctly claim the alleged invention of the '604

Patent. Samsung further asserts that each asserted claim of the '604 Patent is invalid as not containing a written description of the invention and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the alleged invention.

Based on Samsung's present understanding of Plaintiff's infringement contentions,

Samsung asserts that claims 1, 6, 11 and 16-21 of the '604 Patent are invalid for reciting at least
the claim terms "heuristic," "heuristic module," "heuristic algorithm" "respective area of search,"
and/or "configured to search." Claims 16, 18 and 20 of the '604 patent are invalid for reciting at
least the claim term "particularized to its associated relevant area of search." Claims 17, 19 and 21
of the '604 patent are invalid for reciting at least "receiving portions of the information descriptor
as the portions are being inputted," "providing the portions of the information descriptor to the
plurality of heuristic modules as the portions are being received," and "received portion of the
information descriptor." These claim terms/phrases as apparently construed by Apple violate the
written description, enablement and/or definiteness requirements of 35 U.S.C. § 112.

Based on Samsung's present understanding of Plaintiff's infringement contentions, at least one or more of these claim terms/phrases are indefinite because they are inconsistent with and broader than the alleged invention disclosed in the specification and given Plaintiff's apparent constructions of the claims, any person of ordinary skill in the art at the time of the invention would not understand what is claimed, even when the claims are read in light of the specification. Moreover, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear lack written description because the specification of the '604 Patent demonstrates that the patentee neither conceived of nor demonstrated possession of all that Plaintiff now contends the claims cover. In addition, based on Samsung's present understanding of Plaintiff's infringement contentions, each of the asserted claims in which these claim terms/phrases appear are invalid because the specification fails to provide sufficient disclosure to enable any person of ordinary skill in the art to which it pertains, or with which it is most nearly connected, to implement the invention without undue experimentation. The '604 patent specification fails to describe the manner and process of

making and using the claimed invention in such full, clear concise and exact terms as to enable a person of ordinary skill in the art to which it pertains to make and use the claimed invention.

For at least the reasons set forth above, the claims fail to satisfy the requirements of  $\S 112$   $\P 1$  and 2.

#### PATENT LOCAL RULE 3-4 DISCLOSURES

Pursuant to Patent Rule 3-4(a), Defendants will produce, make available for inspection, or identify publicly available information sufficient to show the operation of any specifically identified aspects or elements of an Accused Instrumentality identified by Plaintiff in its Patent L.R. 3-1(c) chart to the extent such information is in Defendants' possession, custody or control. If such information comprises source code, Defendants will make such source code available for inspection pursuant to the protective order in this action. Documents produced pursuant to Patent Local Rule 3-4(a) include the following: SAMNDCA630-00920054 - SAMNDCA630-00926298.

Pursuant to Patent Rule 3-4(b), Defendants are producing or making available for inspection copies of each item of prior art identified pursuant to Patent Rule 3-3(a) which does not appear in the file history of the Asserted Patent to the extent such prior art is in Samsung's possession, custody or control. Documents produced pursuant to Patent Local Rule 3-4(a) include the following: SAMNDCA630-0000616 - SAMNDCA630-00003856; SAMNDCA630-00093416 - SAMNDCA630-00095124; SAMNDCA630-00805769 - SAMNDCA630-00809748; SAMNDCA630-00817832 - SAMNDCA630-00826455; and SAMNDCA630-00926299 - SAMNDCA630-00946068. In addition, devices, systems and /or software are available for inspection upon reasonable notice.

Defendants reserve the right to identify and produce additional documents pursuant to the Patent Rules and the orders of the Court.

1	DATED: August 10, 2012	QUINN EMANUEL URQUHART & SULLIVAN LLP
2		
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SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES

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19	UNITED STATES	DISTRICT COURT
20	NORTHERN DISTRICT OF CAL	LIFORNIA, SAN JOSE DIVISION
20	NORTHERN DISTRICT OF CAR	
21	APPLE INC., a California corporation,	CASE NO. 12-CV-00630-LHK
22	Plaintiff,	
22	r minur,	CERTIFICATE OF SERVICE
23	vs.	
_	CAMCING ELECTRONICS CO. LTD.	
24	SAMSUNG ELECTRONICS CO., LTD., a Korean corporation; SAMSUNG	
25	ELECTRONICS AMERICA, INC., a New	
	York corporation; SAMSUNG	
26	TELECOMMUNICATIONS AMERICA,	
27	LLC, a Delaware limited liability company,	
_	Defendants.	
28		

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1 **CERTIFICATE OF SERVICE** 2 I am employed in the County of Los Angeles, State of California. I am over the age of eighteen years and not a party to the within action; my business address is 865 South Figueroa 3 Street, 10<sup>th</sup> Floor, Los Angeles, California 90017. On August 10, 2012, I served true copies of the following document(s), described as: 4 5 SAMSUNG'S PATENT LOCAL RULE 3-3 AND 3-4 DISCLOSURES on the interested parties in this action addressed as follows: 6 7 ATTORNEYS FOR APPLE INC. **ATTORNEYS FOR APPLE INC.** 8 HAROLD J. MCELHINNY JOSH A. KREVITT hmcelhinny@mofo.com ikrevitt@gibsondunn.com 9 MICHAEL A. JACOBS H. MARK LYON mlyon@gibsondunn.com miacobs@mofo.com RICHARD S. J. HUNG 10 MARK REITER rhung@mofo.com mreiter@gibsondunn.com MORRISON & FOERSTER LLP GIBSON, DUNN & CRUTCHER LLP 11 425 Market Street 1881 Page Mill Road 12 San Francisco, CA 94105-2482 Palo Alto, CA 94302-1211 Telephone: (650) 849-5300 Telephone (415) 268-7000 13 Facsimile (415) 268-7522 Facsimile: (650) 849-5333 Apple/Samsung@gibsondunn.com 14 **ATTORNEYS FOR APPLE INC.** 15 MARK D. SELWYN 16 mark.selwyn@wilmerhale.com WILMER CUTLER PICKERING 17 HALE AND DORR LLP 950 Page Mill Road 18 Palo Alto, CA 94304 Telephone: (650) 858-6000 19 Facsimile: (650) 858-6100 20 BY ELECTRONIC MAIL TRANSMISSION from scottflorance@quinnemanuel.com, by 21 transmitting PDF format copies of such documents to each such person identified above, at the email address listed in their address(es). The documents were transmitted by electronic 22 transmission and such transmission was reported as complete and without error. I declare that I am employed in the office of a member of the bar of this Court at whose 23 direction the service was made. 24 Executed on August 10, 2012, at Los Angeles, California. 25 26 /s/ Scott Florance 27 28