{

}.

2. Qualcomm's Baseband Processors

Apple contends that an agreement between {

} (*Id.* at 143-144 (citing RX-0173C at 52126).)

This covenant, argues Apple, constitutes "authority" for patent exhausting purposes. (*Id.* at 144 (citing *TransCore, LP v. Electronic Transaction Consultants Corp.*, 563 F.3d 1217, 1724 (Fed. Cir. 2009) (holding that "an unconditional covenant not to sue authorized sales by the convenantee for purposes of patent exhaustion").) Apple says {

}. (*Id.* (citing Tr. (Blevins) at 975-976).) Thus, argues Apple, as with the Samsung-authorized Intel chip sales, the Samsung-authorized Qualcomm chip sales "terminate[] all patent rights to th[ose] item[s]." (*Id.*)

As in the case of the Intel baseband processors, Apple contends that Federal Circuit precedent regarding the territorial requirement for patent exhaustion {

}. (*Id.* at 144-145).) Apple contends that this is another basis for patent exhaustion as respects Qualcomm's accused chips. (*Id.* at 145.)

Apple contends that the evidence demonstrates that {

}

Apple disagrees with that portion of Order No. 47 that found that, under the Samsung-Qualcomm agreement, Samsung could {

}. (*Id.* at 146 (citing Order No. 47 at 35-36).) Apple says the cited portion of Order No. 47 is erroneous in two ways. First, the order

treated the key issue for revocation as a choice between French law, which governs Samsung's FRAND commitment, and {

}. (*Id.* (citing Order No. 47 at 35-36).) Apple says that there is no dispute that { }, but the relevant issue does not turn on construction of that contract; rather the critical issue is whether Samsung breached a second, separate obligation, namely, Samsung's commitment to ETSI to grant irrevocable FRAND licenses to Samsung's allegedly "essential" patents (including the '644 patent). (*Id.*) The real question, according to Apple, is whether Samsung's FRAND commitment means what it says—i.e., that Samsung would not revoke licenses to its declared-essential patents. (*Id.*) Apple argues that Dr. Walker's testimony established that, once given, an "irrevocable" commitment to license on FRAND terms cannot be revoked. (*Id.* (citing Tr. (Walker) at 1348-49).) Accordingly, Samsung's purported terminations are ineffective. (*Id.*) Apple says that this is exactly what two courts (in the Netherlands and France) have already concluded. (*Id.* (citing Samsung Electronics Co./Apple Inc., District Court of The Hague ¶¶ 4.15-4.20, Mar. 14, 2012; Tribunal de Grande Instance, Paris, RG No. 11/58301, Dec. 8, 2011 at 16 (attached as Exhibit C).)

Second, argues Apple, Order No. 47 suggested that the question whether Samsung's attempted revocation of the { } complied with ETSI rules was "for the appropriate tribunal," not for the Commission. (*Id.* at 147 (citing Order No. 47 at 36).) Apple says that United States tribunals, including the Commission, have well established authority to adjudicate compliance with standard-setting rules, and Apple requests that the Administrative Law Judge in this Investigation exercise that authority. (*Id.* (citing *Qualcomm,* 548 F.3d at 1022 (affirming holding of waiver defense to patent enforcement based don patentee's failure to comply with standard-setting disclosure rules).) Apple continues to

maintain that the un-rebutted expert testimony shows that under ETSI rules, FRAND licenses cannot be revoked, and those rules apply equally here. (*Id.*)

Samsung says that the {

}" (*Id.* at 252 (citing RX-0175C at § 5.6).) Here, argues Samsung, Apple brought infringement claims against Samsung and, {

}. (*Id.* (citing CX-1587C).)

Samsung says that Apple failed to identify any case or authority that would permit the Commission from preventing Samsung from exercising its express contractual rights under the Qualcomm agreement. (CRBr. at 94.) Although Dr. Walker testified that FRAND commitments were irrevocable, he admitted that he had never participated in the negotiations of licenses and

that he has no expertise in licensing agreements or United States contract law. (*Id.* (citing Tr. (Walker) at 1397-99).) As such, argues Samsung, Apple has not established through any evidence or case law that Samsung's commitments to ETSI prevent it from entering into agreements that expire after a term (e.g., five years) or expressly permit the parties to defensively terminate specific covenants when certain conditions are met. Significantly, says Samsung, Apple offers no evidence from its supplier Qualcomm that it protested Samsung's actions. (*Id.* at 95.)

Staff says that the evidence is not sufficient to show that Samsung exhausted its rights under the '348 and '644 patents as applied to the Qualcomm baseband processor chips in the Apple accused product. (SRBr. at 16.) Staff says that the evidence is insufficient to show that there were United Sates sales of the licensed items. (*Id.*) With respect to Apple's argument that the { }, Staff contends that this misses the point, which is the territorial reach of United States patent law. (*Id.* at 17 (citing *International Rectifier Corp. v. Samsung Elecs. Co.*, 361 F.3d 1355, 1360 (Fed. Cir. 2004) ("Further, it is well known that United States patent laws 'do not, and were not intended to, operate beyond the limits of the United States[.]'") (quoting *Brown v. Duchesne,* 60 U.S. 183, 195 (1856).) Staff notes that in *Fuji Photo Film*, the Federal Circuit confirmed that a patent is not exhausted by a sale outside the United States of a product that is alleged to embody the claimed invention. (*Id.* (citing *Fuji Photo Film Co. Ltd. V. Jazz Photo Corp.*, 394 F.3d 1368, 1376 (Fed. Cir. 2005); *Jazz Photo Corp. v. Int'l Trade Comm'n,* 264 F.3d 1094, 1105 (Fed. Cir. 2001) ("United States patent rights are not exhausted by products of foreign provenance. To invoke the protection of the first sale doctrine, the authorized first sale must have occurred under the United States Patent.").) Staff also cites *Fujifilm Corp. v. Benum,* 605 F.3d 1366, 1371-72 (Fed. Cir. 2010) (reaffirming

territoriality requirements).) Thus, argues Staff, for the doctrine of patent exhaustion to apply, Qualcomm's authorized sales to Apple would need to qualify as "United States sales" even if they were made { }. (*Id.*)

As regards Apple's argument that Qualcomm's sales to Apple were United States sales, even though all manufacture, shipping, and delivery took place outside the United States, because "essential activities" of sales occurred in the United States, Staff notes that in *Litecubes, LLC v. Northern Light Prods., Inc.,* 523 F.3d 1353, 1370-71 (Fed. Cir. 2008), a case relied on by Apple, the Federal Circuit affirmed a jury's conclusion that sales had occurred within the United States because "the American customers were in the United States when they contracted for the accused cubes, and the products were delivered directly to the United States. (*Id.* at 17-18.) Staff says that in this Investigation { }. (*Id.* at 18 citing Tr. (Blevins) 985, 987-988, 990, 992-993, 1004).) Absent delivery in the United States, Staff says that much more evidence would be needed than was presented at the hearing in order to establish that sales of baseband processors from Qualcomm to Apple qualify as United States sales for patent exhaustion purposes. (*Id.*)

As in the case of the Samsung-Intel agreement, Staff maintains that Mr. Blevins was unfamiliar with the underlying documents pertaining to the transactions between Samsung and Qualcomm as would be necessary to demonstrate that there were authorized sales by Samsung for the purpose of patent exhaustion. (*Id.* at 18.)

The Administrative Law Judge finds that the evidence is not sufficient to support Apple's allegation of patent exhaustion with respect to the Qualcomm baseband chips that are incorporated in the Accused Products. The Administrative Law Judge concludes that the

evidence does not demonstrate that there were authorized sales of Qualcomm baseband chips in the United States, owing to the inadequacy of Mr. Blevins's testimony, who was unable to provide sufficient information that the "essential activities" for a sale occurred in this country.

The Administrative Law Judge also concludes that Samsung, {

}. (*See* Order No. 47 at 35.) As regards Dr. Walker's testimony, the Administrative Law Judge concludes that, while Dr. Walker could offer expert testimony on operational and procedural aspects of ETSI, he could not express opinions of matters of law. To the extent that Apple relies on Dr. Walker's testimony for its assertions that Samsung could not exercise its modification rights under the Samsung-Qualcomm agreement, that testimony is found wanting. Furthermore, {

}. Apple has not offered any other evidence sufficient to demonstrate why or how Samsung's exclusion of Apple from Samsung's cross-licensing agreement with Qualcomm is violative of Samsung's FRAND obligations to ETSI. Insofar as the evidence that exists in this Investigation, there is no showing that anyone, including Apple, has complained to the ETSI General Assembly about any improprieties of Samsung regarding its conduct with respect to any standard relevant to the issues involved in this investigator or to the '348 or '644 patents or to its FRAND obligations. And despite the fact that the ETSI Guide on IPRs has a provision for dispute resolution (*See* RX-0713 at Clause 4.3), there is no evidence that Samsung ever refused a request by Apple for mediation of the FRAND aspects of Samsung and Apple's impasse over licensing terms. And even though Apple claims that {

}, according to one of the cases Apple relies on, *Apple v. Motorola,*

No. 1:11-cv-03540 (N.D. Ill.), Motorola had requested a 2.25 percent royalty rate of sales, which is closely comparable. (*Id.* at 17.) While this may be an apples and oranges comparison, the fact is that Apple has offered only attorney argument, rather than substantive evidence, that Samsung breached its FRAND obligations. From all appearances, {

}, even though there was a mechanism in place under ETSI Guidelines for resolving disputes. Dr. Walker did not testify, nor could he, as to the bona fides of Samsung's licensing offer to Apple; nor did anyone else. Judge Posner, in the *Motorola* case found the expert evidence offered by the parties with respect to damages inadequate, but similarly, Apple's evidence of what constitutes a FRAND license under the facts of this Investigation is inadequate. For reasons previously discussed, the Administrative Law Judge finds that there is insufficient evidence to warrant a finding that Samsung breached its obligations with respect to its membership and participation in ETSI.

For the foregoing reasons, the Administrative Law Judge concludes that Apple has not sustained its burden of proof that Samsung's sales to Qualcomm serve to exhaust Samsung's patent rights with respect to the '348 and the '644 patents.

3. Apple's Post-Hearing Assertion of Issue Preclusion on the Issue of Patent Exhaustion

Subsequent to the hearing in this Investigation, on August 30, 2012, Apple submitted what it styled a "Notice of Supplemental Authority Regarding Issue Preclusion as to Apple's Exhausting Defense" ("Notice"). In its Notice, Apple maintains that by virtue of a jury verdict rendered on August 24, 2012 in a case entitled *Apple, Inc. v. Samsung Electronics Co. Ltd. et al.,* No. 5:11-cv-01846 (N.D. Cal.) ("the District Court case"), certain elements of Apple's patent exhaustion defense should be treated as already proven in this Investigation under the doctrine of issue preclusion. (Notice at 1.) Specifically, Apple asserts that the following

elements of its patent exhaustion defense should be deemed proven based on the jury verdict: (1) that Intel was authorized to sell the baseband processor chips under terms of the Samsung-Intel License agreement, and (2) that the sales from Intel to Apple were made in the United States. (*Id.*) Apple argues that based on the jury verdict on these elements and the fact that Samsung does not contest the third element of Apple's patent exhaustion defense – *i.e.* that, to the extent there is infringement, it is because the Intel baseband processor chips substantially embody the '348 and '644 patents – Apple's Samsung-Intel license-based exhaustion defense has been resolved in Apple's favor. (*Id.* at 1-2.)

Apple says that Samsung accused Apple of infringing U.S. Patent Nos. 7,447,516 and 7,675,941 in the District Court case and those infringement allegations relate solely to the Intel baseband processors, PMB 8878 and PMB 9801, incorporated in the iPhone 4 and iPad 2 3G. (*Id.* at 4, (citing Exs. B, C).) In its defense of these infringement allegations, Apple says it introduced the Samsung-Intel License as evidence that Samsung authorized Intel to sell baseband processors indirectly through its sales subsidiary, Intel Americas. (*Id.* (citing Ex. D).) Apple claims it presented evidence that it purchased these processors from Intel Americas in the United States based on the locations of the seller, the buyer, and payment. (*Id.* (citing Ex. E).) Apple claims that the jury was instructed on the three elements of the patent exhaustion defense and based on the evidence presented the jury returned a verdict finding Samsung's patents exhausted. (*Id.* at 4-5 (citing Ex. A).) Apple asserts that on August 24, 2012, the court entered judgment for Apple on the jury issues. (*Id.* at 5 (citing Ex. I).)

Apple argues that under the four-part test for issue preclusion, the jury's verdict in the District Court case "are determinative of the issues of (1) Intel's authority under the Samsung-Intel License to sell Apple the baseband processors used in the accused products, and (2) whether

the sale of Intel baseband processors to Apple takes place in the United States." (*Id.* at 6-7.) Apple asserts that those two issues in the District Court case are identical to the issues presented in this Investigation. (*Id.* at 7.) Apple says the infringement allegations in the District Court case concerned the same processors as those accused in this Investigation; the jury found that the same license at issue in this Investigation authorized Intel to sell those processors to Apple; and the jury found that the identical sales of those processors that are at issue in this Investigation were made to Apple in the United States. (*Id.*)

Apple also contends that those two issues were actually litigated in the District Court case. (*Id.*) In support, Apple says these issues were central to Apple's patent exhaustion affirmative defense, which was the subject of evidence presented at trial and argued by both parties. (*Id.*) Apple also says that Samsung cannot avoid issue preclusion by arguing that it did not actually litigate the issues because it focused on other issues at the trial. (*Id.* at 7-8 (citing Charles Alan Wright & Arthur R. Miller, 18 Federal Practice and Procedure § 4419 (2d ed. 2002 & Supp. 2012).)

Apple next claims that resolution of these two elements was essential to a final judgment in the District Court case because in order to find that Samsung's patent rights to the '516 and '941 patents were exhausted, the jury necessarily had to find that Samsung had authorized Intel to sell the baseband processors and those sales were made in the United States. (*Id.* at 8 (citing Ex. H).) Apple says that Samsung cannot avoid application of issue preclusion on this point by arguing that the jury's verdict is not final because it is subject to post-judgment motions and appeals because the pendency of an appeal has no effect on the judgment's finality. (*Id.* at 9 (citing *SSIH Equip., S.A. v. U.S.I.T.C.*, 718 F.2d 365, 370 (Fed. Cir. 1983); *Pharmacia & Upjohn Co. v. Mylan Pharmaceuticals, Inc.*, 170 F.3d 1373, 1381 (Fed. Cir. 1999); *Certain Personal*

Computers with Memory Management Information Stored in External Memory and Related Materials, Inv. No. 337-TA-352, Order No. 25, 1994 WL 930225, at *3 (U.S.I.T.C., June 6, 1994)).) Apple also says that Samsung cannot avoid issue preclusion by arguing that, because the jury found for Apple on multiple bases, its findings on these two elements were not essential to the final judgment. (*Id.* at 9-10 (citing Restatement (First) of Judgments § 68, comment n; 18 Wright & Miller, *Federal Practice and Procedure* § 4421, at 564 (2d ed. 2002); *Mendenhall v. Barber-Greene Co.*, 26 F.3d 1573, 1583 (Fed. Cir. 1994); *Jean Alexander Cosmetics, Inc. v. L'Oreal USA, Inc.*, 458 F.3d 244, 255 (3d Cir. 2006); *Magnus Elecs., Inc. v. La Republica Arg.*, 830 F.2d 1396, 1402 (7th Cir. 1987); *Gelb v. Royal Globe Ins. Co.*, 798 F.2d 38, 45 (2d Cir. 1986); *In re Westgate-California Corp.*, 642 F.2d 1174, 1176-77 (9th Cir. 1981)).)

Finally, Apple argues that Samsung had a full and fair opportunity to litigate these two elements in the District Court case. (*Id.* at 11.) Apple asserts that Samsung cannot raise any argument under this factor because there were no significant procedural limitations in the District Court case, Samsung had incentive to litigate these elements in that case, and there is no question that there was actual adversity between Samsung and Apple in the District Court case. (*Id.* (citing *Banner v. United States*, 238 F.3d 1348, 1354 (Fed. Cir. 2001)).) Apple concludes that each of the elements for the application of issue preclusion is met with respect to whether the license authorized the sales of the baseband processors by Intel to Apple and whether those sales occurred in the United States, and thus, Apple says issue preclusion compels a finding that Samsung's rights in the '348 and '644 patents are exhausted with respect to Apple accused products containing the PMB 8878 or PMB 9801 baseband processors. (*Id.*)

On September 5, 2012, Samsung filed a response to Apple's Notice. Samsung asserts that Apple's Notice is an improper use of a Notice of Supplemental Authority under the

Commission Rules and is actually a motion for summary determination on the issue of patent exhaustion. (Response at 1-2.) Samsung argues that this Notice was filed in disregard of the Commission Rules and Ground rules that govern motion for summary determination and should be disregarded because it is untimely, Apple failed to meet and confer before filing the Notice, and Apple did not provide a statement of material facts as required by Ground Rule 2.3. (*Id.* at 6-7.)

Regarding the merits of Apple's arguments, Samsung argues that issue preclusion is not appropriate here. (*Id.* at 7.) First, Samsung argues that the two factual findings Apple relies upon are not issues for the purpose of issue preclusion. (*Id.*) Samsung says that Commission rules do not permit Apple to seek resolution of particular subsidiary elements of a defense and a party can only move to resolve dispositive issues and parts of issues that can dispose of a claim or defense in its entirety. (*Id.* at 7-8 (citing Commission Rule 210.18(a); *Certain Mobile Telephones and Wireless Communication Devices Featuring Digital Cameras, and Components Thereof*, Inv. No. 337-TA-703, Notice of Commission Determination, 2010 ITC LEXIS 2137, at *3-5 (Oct. 20, 2010)).) Samsung also argues that the issues presented here are not identical to those presented in the District Court case because the District Court case did not involve any of the patents at issue in this Investigation and different subsets of products were accused. (*Id.* at 8.) Samsung says that the only issue presented to the jury was whether sales of the iPhone 4 and iPad 2 3G products, which incorporate the PMB 9801 chip, exhaust Samsung's rights in the '941 and '516 patents. (*Id.* (citing Declaration of Gregory H. Lantier, Ex. A).) Samsung says that products containing the PMB 8878 baseband chip were at issue in the District Court case and the '941 and '516 patents at issue in the District Court case are not at issue here. (*Id.*) According to Samsung, because the asserted patents at issue here were not at issue in the District Court case,

the jury necessarily could not have concluded that products embodying these patents were sold in the U.S. or even covered by the Samsung/Intel license. (*Id.* at 9 (citing *Quanta*, 553 U.S. at 628).) Samsung also takes issue with Apple's contention that the Administrative Law Judge should assume that the PMB 8878 and PMB 9801 chips embody the inventions of the '644 and '348 patents because Apple bears the burden of affirmatively establishing each of the elements of its patent exhaustion defense and Apple cannot simply assert that this element has not been disputed by Samsung. (*Id.* (citing *Jazz Photo Corp. v. United States*, 439 F.3d 1344, 1350 (Fed. Cir. 2006)).)

Samsung also argues that the exhaustion issues presented here were not actually litigated in the District Court case because the parties did not litigate whether Samsung's rights to the '644 and '348 patent were exhausted or whether any rights were exhausted with respect to the { }. (*Id.* at 10.) Samsung also asserts that the elements of exhaustion were not essential to the jury verdict because Federal Circuit case law establishes that where alternative bases for a judgment exist, neither basis carries issue preclusive effect. (*Id.* 10-12 (citing *Comair Rotron, Inc. v. Nippon Densan Corp.*, 49 F.3d 1535, 1538 (Fed. Cir. 1995); *Masco Corp. v. United States*, 303 F.3d 1316, 1329-31 (Fed. Cir. 2002); Restatement (Second) of Judgments (1982) § 27 comment i).) Finally, Samsung asserts that the jury verdict with respect to exhaustion is contrary to the verdict of non-infringement. (*Id.* at 12.) Samsung says the jury's findings that the '941 and '516 patents were not infringed is inconsistent with the finding that the patents are exhausted because there cannot be exhaustion without infringement. (*Id.* at 13-14.) According to Samsung, this inconsistency provides another reason why the Administrative Law Judge should not apply the doctrine of issue preclusion here. (*Id.* at 14 (citing *Certain*

Semiconductor Integrated Circuits Using Tungsten Metallization and Products Containing Same, Inv. No. 337-TA-648, Comm'n Op. (U.S.I.T.C., Feb. 29, 2009)).)

On September 7, 2012, Apple filed a rebuttal to Samsung's response to Apple's Notice. In its rebuttal, Apple argues that Samsung misstated the Federal Circuit precedent regarding whether alternative bases for a judgment can carry preclusive effect. (Rebuttal at 1.) Apple asserts that the Federal Circuit has rejected the Restatement (Second) of Judgments rule cited by Samsung. (*Id.* (citing *Comair*, 49 F.3d at 1535).) Apple also argues in rebuttal that Samsung does not dispute that the identical Samsung-Intel license at issue here was at issue in the District Court case, that the identical facts are identical regarding the jury's finding that the sales are made in the United States, and that the jury determined that Samsung's rights in the PMB 9801 processor were exhausted. (*Id.* at 2.) Further, Apple asserts that {

}, and thus, the only relevant distinction between this Investigation and the District Court case is the patents at issue. (*Id.*)

The Administrative Law Judge concludes that the jury's verdict in *Apple Inc. v. Samsung Electronics Co. Ltd. et al.,* No. 5:11-cv-01846 (N.D. Cal.) that "Apple has proven by a preponderance of the evidence that Samsung is barred by patent exhaustion from enforcing... [patents '516 and '941] against Apple[,]" is not issue preclusive with respect to the '348 or '644 patents in this Investigation. (Notice, Ex. A, No. 33 at 20.)

The Federal Circuit has held that issue preclusion, or collateral estoppel, "is appropriate only if: (1) the issue is identical to one decided in the first action; (2) the issue was actually litigated in the first action; (3) resolution of the issue was essential to a final judgment in the first

action; and (4) plaintiff had a full and fair opportunity to litigate the issue in the first action." *In re Freeman*, 30 F.3d 1459, 1465 (Fed. Cir. 1994.)

According to the jury's verdict, they found that there was no infringement by Apple of Samsung's asserted patents. (Notice, Ex. A, No. 24 at 17.) However, the jury also found that Samsung's patents were exhausted by virtue of the Samsung-Intel agreement. (*Id.* No. 33 at 20.) If the accused Apple products do not infringe Samsung's '516 and '941 patents, as alleged by Samsung in the district court case, by virtue of those products' incorporation of the Intel's PMB 9801 baseband processor, then the sale of those chips by Intel would not exhaust Samsung's patents, because the PMB 9801 logically could not have practiced all of the limitations of those patents. The affirmative defense of exhaustion requires proof of an authorized, territorial sale of articles embodying the patents at issue. *Quanta*, 553 U.S. at 628. Therefore the jury's verdict with respect to the issue of patent exhaustion cannot be considered an essential fact determination by the jury, since it is inconsistent with the jury's verdict that Apple's products containing the PMB 9801 did not infringe Samsung's patents.

Although Apple maintains that these were not inconsistent verdicts, but rather, alternative verdicts, this does not settle the question of whether the jury's verdict with respect to the issue of exhaustion satisfies the Federal Circuit's requirement that, for purposes of issue preclusion, the preclusive finding must be essential for a final judgment. In *Comair Rotran, Inc. v. Nippon Densan Corp.,* 49 F.3d 1535, 1538 (Fed. Cir. 1995), the court found that an alternative factual finding was not essential, and therefore not issue preclusive:

> [T]he specific finding concerning Nidec's fans has not been shown to be essential to the New Jersey court's judgment. It suffices to negate preclusion that the finding as to Nidec's infringement was not essential to the damages decision in the New Jersey action. *See* Parklane Hosiery Co. v. Shore, 439 U.S. 322, 326 n. 5, 99 S.Ct. 645, 649 n. 5, 58 L.Ed.2d 552 (1979) ("[J]udgment in the prior suit precludes relitigation of issues actually litigated and necessary to the outcome of

> the first action."); *Mother's Restaurant, Inc. v. Mama's Pizza, Inc.*, 723 F.2d 1566, 1571, 221 USPQ 394, 398 (Fed.Cir.1983) (to give preclusive effect to a particular finding, it must have been necessary to the judgment in the prior case).

In concurring, Judge Rader added this: "the issue of Nidec's alleged infringement of the '028 patent was not essential to the Special Master's finding in the New Jersey case. The Special Master simply determined the existence of acceptable non-infringing alternatives to Rotran's '028 rotor as required by the *Panduit* test for lost profits."

Apple cites the Third Circuit's holding in *Jean Alexander*, 458 F.3d at 255 for Apple's proposition that "independently sufficient alternative findings should be given preclusive effect." (Notice at 10.) However, the Third Circuit pointed out in that decision that there is a split among the circuit courts on this issue and that the Federal Circuit holds the contrary view, citing *Comair,* 49 F.3d at 1538-39. (*Id.* at 252 ("By contrast, the Courts of Appeals for the Tenth and Federal Circuits have refused to give preclusive effect to alternative findings that were each independently sufficient to support a judgment. *See Comair Rotron, Inc. v. Nippon Densan Corp.,* 49 F.3d 1535, 1538-39 (Fed. Cir. 1995) (holding that a finding was not essential to a judgment for collateral estoppel purposes where judgment was supportable on other grounds)…").)

Thus, the Administrative Law Judge concludes that the jury's verdict with respect to patent exhaustion is not preclusive of the issue of patent exhaustion that has been asserted by Apple in this case. The Administrative Law Judge further concludes that Apple's Notice is procedurally improper, for the reasons set forth by Samsung in its opposition.

VIII. DOMESTIC INDUSTRY

As stated in the Notice of Investigation, a determination must be made as to whether an industry in the United States exists as required by subsection (a)(2) of Section 337. Section 337

declares unlawful the importation, the sale for importation or the sale in the United States after importation of articles that infringe a valid and enforceable U.S. patent "only if an industry in the United States, relating to articles protected by the patent . . . concerned, exists or is in the process of being established." 19 U.S.C. § 1337(a)(2); *Certain Ammonium Octamolybdate Isomers*, Inv. No. 337-TA-477, Comm'n Op. at 55 (U.S.I.T.C., Jan. 2004) ("*Certain Isomers*"). The domestic industry requirement consists of both an economic prong (*i.e.*, the activities of, or investment in, a domestic industry) and a technical prong (*i.e.*, whether complainant practices its own patents). *Certain Isomers*, at 55. The complainant bears the burden of proving the existence of a domestic industry. *Certain Methods of Making Carbonated Candy Products,* Inv. No. 337-TA-292, Comm'n Op. at 34-35, Pub. No. 2390 (U.S.I.T.C., June 1991).

Thus, in this Investigation Samsung must show that it satisfies both the technical and economic prongs of the domestic industry requirement with respect to the '348, '644, '980 and '114 patents. Samsung alleges that certain of its products practice the asserted patents in order to show that Samsung meets the domestic industry requirement (the "DI Products"). (CBr. at 7.) According to Samsung,

> The Gravity Smart (SGH-T589) and Dart (SGH-T499) both comprise { }-0 baseband processors. They both practice the '644, '348, '980, and '114 patents, and the Gravity Smart is representative of all of these devices.
>
> The Galaxy S 4G (SGH-T959V), Infuse 4G (SGH-I997), Exhibit 4G (SGH-T759) and Sidekick 4G (SGH-T839) comprise { }. They practice the '348, '644, '980, and '114 patents. The Galaxy S 4G is representative of all of these devices.
>
> In addition to the devices listed above, the Galaxy S II (SGH-T989), Exhibit II 4G (SGHT679), Nexus S (GH-I9020), Vibrant (SGH-T959), Captivate Glide (SGH-I927), Seine_Galaxy S2 (SGH-I777), Galaxy S2 Skyrocket (SGH-I727), Behold II (SGH-T939), Double Time (SGHI857), Captivate (SGH-I897), Droid Charge (SCH-I510), Galaxy Prevail (SPH-M820), Replenish (SPH-M580), Intercept (SPH-M910), Acclaim (SCH-R880), Continuum (SCH-I400), Epic 4G (SPH-D700), Fascinate/Mesmerize/Showcase (SCH-I500), Gem (SCH-I100), Moment/Instinct Q (SPH-M900), Transform (SPH-M920), and Indulge (SCH-

> R910) all use Android operating system Froyo or later. These practice the '980 and '114 patents. The Galaxy S 4G and Gravity Smart are representative of these devices for these patents.
>
> The Impression Full Qwerty Touch (SGH-A877), Behold (SGH-T919), Eternity II (SGHA597), Eternity Touch (SGH-A867), Flight II (SGH-A927), Highlight (SGH-T749), Rugby II (SGH-A847), Mythic (SGH-A897), and Solstice (SGH-A887) comprise { } baseband processors. These phones practice the '348 patent and the Impression Full Qwerty Touch is representative of all these devices.

(*Id.*)

At issue is whether the DI Products meet the technical prong of the domestic industry requirement with respect to the '348, '644, '980 and '114 patents. In addition, at issue is whether the economic domestic prong is met with respect to all of the asserted patents. The Administrative Law Judge finds that the technical domestic industry prong is not met with respect to the '348, '644, '980 and '114 patents, as discussed below. The Administrative Law Judge further finds that the economic domestic industry prong is met with respect to the '348, '644, '980 and '114 patents, as discussed below.

A. Technical Analysis

A complainant in a patent-based Section 337 investigation must demonstrate that it is practicing or exploiting the patents at issue. See 19 U.S.C. § 1337(a)(2) and (3); *Certain Microsphere Adhesives, Process for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm'n Op. at 8, Pub. No. 2949 (U.S.I.T.C., January 16, 1996). "In order to satisfy the technical prong of the domestic industry requirement, it is sufficient to show that the domestic industry practices any claim of that patent, not necessarily an asserted claim of that patent." *Certain Isomers, supra*, at 55. Fulfillment of the "technical prong" of the domestic industry requirement is not determined by a rigid formula but rather by the articles of commerce and the realities of the marketplace. *Certain Diltiazem*

Hydrochloride and Diltiazem Preparations, Inv. No. 337-TA-349, Initial Determination at 139, Pub. No. 2902 (U.S.I.T.C., June 1995) (unreviewed in relevant part); *Certain Double-Sided Floppy Disk Drives and Components Thereof*, Inv. No. 337-TA-215, Views of the Comm'n, Additional Views of Chairwoman Stern on Domestic Industry and Injury at 22, 25, Pub. No. 1860 (U.S.I.T.C., May 1986).

The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109, 1990 WL 710463 (U.S.I.T.C., May 21, 1990), aff'd, Views of the Commission at 22 (October 31, 1990). "First, the claims of the patent are construed. Second, the complainant's article or process is examined to determine whether it falls within the scope of the claims." *Id.* The technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. *Certain Dynamic Sequential Gradient Devices and Component Parts Thereof*, Inv. No. 337-TA-335, Initial Determination at 44, Pub. No. 2575 (U.S.I.T.C., November 1992).

1. '348 Patent.

a) Qualcomm Baseband Processor Products

Samsung says the Gravity Smart (SGH-T589) and Dart comprise a {

}. The Impression Full Qwerty Touch (SGH-A877), Behold (SGH-T919), Eternity II (SGH-A597), Eternity Touch (SGH-A867, Flight II (SGH-A927), Highlight (SGH-T749) Rugby II (SGH-A847), Mythic (SGH-A897), and Solstice (SGH-887) each comprise a {

} baseband processor. (CBr. at 45 (citing JX-29C (Son Dep.) at 45; CX-0836C; CX-0832C).) These products are analyzed together as the "DI Qualcomm Products." (*Id.*)

Samsung says the DI Qualcomm Products support UMTS and communicate on the UMTS system; therefore Samsung's infringement analysis by virtue of compliance with TS 25.212 and TS 25.211 applies equally to these domestic products. (*Id.*)

Samsung says that these products implement the invention in firmware loaded onto the { } of the chip. (*Id.* (citing Tr. (Min) at 606-607; CX-477C; CX-481C).) {

}. (*Id.*)

Samsung contends that the code makes clear that the TFCI information input is in fact 10 bits, because the { } the 10-bit TFCI that was {

}. (*Id.* (citing Tr. (Min) at 621-622).) Samsung says Dr. Davis admitted that the "number of sequences that we're using corresponds to the number of input bits. (*Id.* at 46-47 (citing Tr. (Davis) at 1990).) The number of sequences, which in this case is 10, must be the same number of bits in the TFCI,

which under Dr. Davis's opinion must be 10, according to Samsung. (*Id.* at 47.) The source code, standards documentation, and Dr. Davis's opinion all support the fact that the { } must be 10 bits, says Samsung. (*Id.*)

Samsung says that { }. (*Id.* (citing CX-475 C; CX-480C; Tr. (Min) at 616, 620).) This function takes as an input the uncoded 10-bit TFCI value and outputs a 32-bit codeword. (*Id.* (citing Tr. (Min) at 616).) {

}. (*Id.* (citing Tr. (Min) at 632).) Samsung says the illustration below demonstrates this comparison.

Bit Position	W1	W2	W4	W8	W16	All 1	M1	M2	M4	M8
1	1	0	0	0	0	1	0	0	0	0
2	0	1	0	0	0	1	1	0	0	0
3	1	1	0	0	0	1	0	0	0	1
4	0	0	1	0	0	1	1	0	1	1
5	1	0	1	0	0	1	0	0	0	1
6	0	1	1	0	0	1	0	0	1	0
7	1	1	1	0	0	1	0	1	0	0
8	0	0	0	1	0	1	0	1	1	0
9	1	0	0	1	0	1	1	1	1	0
10	0	1	0	1	0	1	1	0	1	1
11	1	1	0	1	0	1	0	0	1	1
12	0	0	1	1	0	1	0	1	1	0
13	1	0	1	1	0	1	0	1	0	1
14	0	1	1	1	0	1	1	0	0	1
15	1	1	1	1	0	1	1	1	1	1
17	1	0	0	0	1	1	1	1	0	0
18	0	1	0	0	1	1	1	1	0	1
19	1	1	0	0	1	1	1	0	1	0
20	0	0	1	0	1	1	0	1	1	1
21	1	0	1	0	1	1	0	1	0	1
22	0	1	1	0	1	1	0	0	1	1
23	1	1	1	0	1	1	0	1	1	1
24	0	0	0	1	1	1	0	1	0	0
25	1	0	0	1	1	1	1	1	0	1
26	0	1	0	1	1	1	1	0	1	0
27	1	1	0	1	1	1	1	0	0	1
28	0	0	1	1	1	1	0	0	1	0
29	1	0	1	1	1	1	1	1	0	0
30	0	1	1	1	1	1	1	1	1	0
31	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	1	0	0	0	0
16	0	0	0	0	1	1	1	0	0	0

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{ } (*Id.* at 47-48.) According to Samsung, the encoding table on the left is derived from the '348 patent sequences and the { }. (*Id.* at 47.) Samsung says the encoding tables are identical. (*Id.* (citing Tr. (Min) at 632).) Therefore, reasons Samsung, { }. (*Id.*)

Once {

} maps two TFCI code-word bits at a time into the 15 transmission-frame slots, which results in a 30-bit TFCI codeword

(2 bits x 15 slots = 30 bits). (*Id.* (citing Tr. (Min) at 625-626).) The remaining two bits are punctured (i.e. ignored). (*Id.*)

(1) *Whether the DI Qualcomm Products Practice Claim 82*

Samsung maintains that the DI Qualcomm Products practice claim 82 because (1) they are UMTS devices and therefore have to practice the standard TS 25.211 and TS. 25.212 (*Id.* at 48-49 (citing Tr. (Min) at 602-604) and (2) the Qualcomm source code demonstrates that this claim is practiced. (*Id.* at 49 (citing Tr. (Min) at 604-605).) Samsung argues that the same reasons for why the Accused Products infringe the '348 patent (because they are UMTS devices) apply to why the DI Qualcomm Products practice the asserted '348 patent claims. (*Id.*)

(a) *"a controller for outputting a 32-bit codeword...that corresponds to a 10-bit TFCI information input to the controller"*

Samsung says the Qualcomm source code conforms to the standard in precisely the same manner as section 4.3.3 of TS 25.212. (*Id.*) The claimed controller is found in the { } of the Qualcomm baseband processor chip and firmware, such as {

} to encode the 10-bit TFCI information input into a 32-bit TFCI codeword. (*Id.* (citing Tr. (Min) at 606-607).) Samsung says the Qualcomm baseband processor utilizes a 10-bit TFCI information input {

}. (*Id.*) According to Samsung, Dr. Davis admits that the DI Qualcomm Products output a 32-bit codeword. (*Id.* (citing Tr. (Davis) at 2058).) Each 10-bit TFCI information input necessarily corresponds to a 32-bit TFCI codeword, because the { }, generates a unique 32-bit codeword for each 10-bit TFCI input to the controller. (*Id.* (citing Tr. (Min) at 620, 623-624).)

Samsung says Apple should not be permitted to argue that Qualcomm baseband processors only encode { }, because it has already been found that Apple never served interrogatory responses disclosing Apple's contention that the DI Qualcomm Products practice the '348 claims owing to the fact that they employ { }. (*Id.* at 49-50.) Samsung says that Apple disclosed this contention for the first time in Dr. Davis's rebuttal expert report which was too late for Samsung's expert to develop responses to this argument. (*Id.* at 50 (citing Order No. 65).) Samsung says that Apple's failure to timely disclose its theories prejudiced Samsung.) (*Id.*) Samsung says that if Apple were now allowed to argue its stricken { }, it would exacerbate the prejudice to Samsung and reward Apple for violating the basic rules of discovery, which Apple should not be allowed to do. (*Id.* at 50 (*Id.* (citing Order No. 65 and *Anascape Ltd. v. Microsoft Corp.*, 2008 WL 7180756 (E.D. Tex. May 1, 2008) and *Oracle America, Inc. v. Google, Inc.*, 2011 WL 4802535 (N.D. Cal. Oct. 11, 201).)

Samsung maintains that Dr. Min demonstrated that, with respect to the DI Qualcomm Products the 10-bit TFCI information input is {

}) According to Samsung, Apple ignores this input and focuses on the steps within {

} Claim 82 only requires that there be a 10-bit TFCI information input to the controller, and the source code and section 4.3.3 of TS 25.212 demonstrates that the

DI Qualcomm Products do in fact input a 10-bit TFCI information to the controller. (*Id.* (citing Tr. (Min) at 606-608).)

Samsung argues that this limitation is "infringed" under the doctrine of equivalents and the Accused Products perform the same function as the claims, etc. (*Id.*) Since this argument has nothing to do with whether the DI Qualcomm Products practice the claim and because it is solely attorney argument, it will not be considered.

(b) *"a 10 bit TFCI information input to the controller from a plurality of possible 10 bit TFCI information"*

Samsung says the DI Qualcomm Products practice this limitation. (*Id.* at 52 (citing Tr. (Min) at 624-625).) The Qualcomm source code utilizes 10-bit TFCI information input, { } (*Id.*) Each of the bits in this input can be one of two variables, 0 or 1. (*Id.* (citing Tr. (Min) at 518-520).) Therefore, the TFCI information input can be one of many possible values. (*Id.*)

(c) *"a 32 bit codeword from among a plurality of 32 bit codewords"*

Samsung argues that the Qualcomm source code demonstrates that the DI Qualcomm Products each generates a different 32-bit output for each different 10-bit input, so the resulting 32-bit codeword is from more than one possible 32-bit codeword. (*Id.* (citing Tr. at 522 (Min)).) Utilizing { } from the Qualcomm source code, the DI Qualcomm Products generate a different 32-bit output for each different 10-bit input, so the resulting 32-bit codeword is from more than one possible 32-bit codeword. (*Id.* (citing Tr. at 518-520 (Min)).)

(d) *"a puncturer for puncturing two bits from the 32 bit codeword output by the controller"*

Samsung says the DI Qualcomm Products comprises the "puncturer" limitation of claim 82. (*Id.*) Samsung says that the function { } is responsible from mapping

the codeword to the transmission frame. (*Id.* at 53 (citing Tr. (Min) at 625-626).) {

} The remaining two bits are punctured (i.e., ignored). (*Id.*) Therefore, under the claim construction of "puncturing" in this Investigation, the DI Qualcomm Products, through firmware running on the modem DSP, puncture two bits from the codeword output by the controller. (*Id.*)

(e) *"outputting a 30 bit codeword"*

Samsung claims that the DI Qualcomm Products output a 30-bit codeword. (*Id.* at 54.) These products map 30-bits out of the 32-bit codeword into a transmission frame, and transmit 30 coded TFCI bits to the base station. (*Id.* at 54 (citing Tr. (Min) at 527-528, 553-555).) When these products transmit 30 bits out of the 30-bit codeword, 30 bits are necessarily output. (*Id.*)

(f) *"each of the two bits being punctured at a predetermined position"*

Samsung says the DI Qualcomm Products practice this claim element because the Qualcomm source code { } maps bits at positions 0 to 29 and does not map the bits at positions 30 and 31, and therefore bit positions 30 and 31 are predetermined positions. (*Id.* (citing Tr. at 625-626 (Min)).)

(g) *"a 30 bit codeword that is equivalent to the 32 bit codeword output by the controller"*

According to Samsung, the DI Qualcomm Products practice this claim. (*Id.* (citing Tr. at 628 (Min)).) Samsung says that { } generates codeword with a minimum distance of 12. (*Id.* (citing Tr. at 628 (Min)).) Samsung says there are a plurality of possible 32-bit codewords, because each possible 10-bit TFCI information input is encoded into a unique 32-bit codeword. (*Id.* at 54-55.) Each of these codewords differs in at least 12 bit positions,

because the minimum distance is 12. (*Id.* at 55 (citing Tr. at 628 (Min)).) Therefore, eliminating two bits still results in a plurality of unique codewords; and therefore the 30-bit codeword is equivalent to the 32-bit codeword output by the controller. (*Id.*)

(2) *Whether the DI Qualcomm Products Practice Claim 75*

Samsung notes that claim 75 differs from claim 82 in that the controller recited as the first limitation generates a 30-bit codeword instead of a 32-bit codeword. (CBr. at 55 (citing Tr. at 630 (Min)).) The claimed controller in the DI Qualcomm Products is the { } in the Qualcomm baseband processor. (*Id.*) According to Samsung, the { } is responsible for encoding the 10-bit TFCI into a 32-bit codeword and puncturing two bits from the 32-bit codeword to result in a 30-bit codeword. (*Id.* (citing Tr. at 630 (Min)).) With respect to claim 82, the controller was considered two separate components within the { }; however, for claim 75, the controller includes both the encoding and puncturing functions of the { }. (*Id.* (citing Tr. at 630 (Min)).) Samsung contends that this difference does not affect the analysis of whether the DI Qualcomm Products practice the claims. (*Id.*)

(a) *"a controller for outputting a 30 bit codeword...that corresponds to a 10 bit TFCI information input to the controller"*

Samsung says that for the same reasons it previously gave, the DI Qualcomm Products all satisfy this limitation, too. The function { } takes a 10-bit TFCI information input and encodes the TFCI into a 32-bit TFCI codeword. (*Id.* (citing Tr. at 630 (Min)).) The function { } maps 30 bits out of the 32-bit TFCI codeword into the transmission frame. (*Id.* at 56 (citing Tr. at 630 (Min)).) Therefore, the Qualcomm source code demonstrates that the controller takes a 10-bit TFCI information input and outputs a 30-bit TFCI codeword. (*Id.*) Since the 30-bit codeword is generated from the10-bit TFCI information, by encoding the

10-bit TFCI information input into a 32-bit codeword and puncturing two bits from the 32-bit codeword, the 30-bit codeword corresponds to the 10-bit TFCI information input. (*Id.* (citing Tr. at 532-533 (Min)).) Samsung says that as previously explained, the 30-bit codeword contains the same information as the 32-bit codeword, which represents the 10-bit TFCI information. (*Id.*)

Once again Samsung includes in the section of its brief that discusses domestic industry a section generally stating that this limitation is infringed under the doctrine of equivalents along with an argumentative conclusion as to why it does. (*Id.*) This discussion of "the Accused Apple Products" has no application to the subject of whether the domestic industry products practice the asserted claim and furthermore does not cite any evidence; therefore, it is not being considered.

(b) *"a 10 bit TFCI information input to the controller from a plurality of possible 10 bit TFCI information"*

Samsung says for the same reasons it argued with respect to claim 82, the DI Qualcomm Products also satisfy this element of claim 75. (*Id.* at 57.)

(c) *"a 30 bit codeword from among a plurality of 30 bit codewords"*

Samsung says that for the same reasons discussed above as regards claim 82, the DI Qualcomm Products also satisfy this limitation. (*Id.*) Samsung says { } generates codewords with a minimum distance of 12. (*Id.* (citing Tr. at 628 (Min)).) Each of these codewords differs in at least 12 bit positions because the minimum distance is 12; therefore eliminating two bits still results in a plurality of unique codewords. Thus the resulting 30-bit codeword is from more than one possible 30-bit codeword. (*Id.*)

(d) *"a 30 bit codeword output by the controller is equivalent to a 32 bit codeword that corresponds to the 10 bit TFCI information input to the controller"*

Samsung says that this limitation is met by the DI Qualcomm Products for the same reasons that Samsung put forth in its argument with respect to claim 82. (*Id.* (citing Tr. at 631 (Min)).)

Apple says that Samsung's domestic industry contentions fail for the same reasons as its infringement contentions, plus some additional reasons. (RBr. at 45.) Apple says that Samsung failed to present evidence that the Qualcomm baseband processors met three limitations: (1) outputting a codeword that corresponds to a 10 bit TFCI information input (claims 75 and 82), (2) a controller for outputting a 30 bit codeword (claim 75), and (3) a puncturer for puncturing the 32-bit codeword (claim 82).

Apple argues that with respect to claims 75 and 82, the Qualcomm baseband processors do not output a codeword that "corresponds to a 10-bit TFCI information input. (*Id.*) According to Apple, Dr. Davis explained that section 4.3.3 of the ETSI standard does not require a 10-bit TFCI information input; rather, it allows up to 10 bits of TFCI information input and ETSI devices can encode only 7, 8, or 9 bits of TFCI information. (*Id.* at 46 (citing Tr. (Davis) at 2058; CX-1099 § 4.3.3 ("if the TFCI consists of less than 10 bits, it is padded with zeros to 10 bits, by setting the most significant bits to zero.").) Apple says Dr. Min did not contest this and admitted that the standard permits a system designer to use less than 10 bits of TFCI information and pad with zeros. (*Id.* (citing Tr. at 1245 (Min)).)

Apple argues that Dr. Min opined that in the Qualcomm chips the input to the

{

}).) Dr. Min testified that a 10-bit input consisting partially of padded 0s is still "a 10 bit TFCI information" in the asserted claims, a theory that Dr. Min advanced for the first time at his deposition. (*Id.* (citing Tr. at 1248 (Min)).) Apple says that during cross-examination, Dr. Min's position was expressly refuted by the unasserted claims of the '348 patent, which distinguish "10 bit TFCI information" from a "10 bit unit" that contains fewer than 10 bits of "TFCI information," along with padded 0s. (*Id.* (citing Tr. at 1245-48 (Min)).) Specifically, argues Apple, independent claims 36, 42, 46, 52, 56, and 61 refer to receiving TFCI information bits as part of a "10 bit unit," rather than receiving a "10 bit TFCI information" as required by claims 75 and 82. As the dependent claims indicate, not all bits of a "10 bit unit" are necessarily "TFCI information," and the non-TFCI information bits can be padded 0s. (*Id.* (citing JXM-1 (the '348 patent) at 42- ("The TFCI encoding apparatus of claim 43, wherein if the TFCI information bits are less than 10 bits, 0 is added to the TFCI information bits to represent the TFCI information bits in a 10 bit unit."); *see also,* claims 38, 48, 54, 58, and 63).) Thus, the patent itself distinguishes between "TFCI information" and padded 0s, and padded 0s are not TFCI information, argues Apple. (*Id.* at 46-47.)

Apple says that even ignoring the clear text of the patent and assuming that padded 0s are "TFCI information," Samsung did not prove that the input to the encoding function identified by Dr. Min, the { }, in the Qualcomm chip is 10 bits. (*Id.* at 47.) Dr. Min offered the bald opinion that the input function is 10 bits (*id.* (citing Tr. at 1255 (Min)); however Dr. Davis testified that he had reviewed the source code identified by Dr. Min, and there was no evidence that there would be 10 bits of input, and therefore that cannot be 10 bits. (*Id.* (citing Tr. at 2057 (Davis)).) Apple notes that Samsung never asked the Qualcomm corporate representative how many bits were input into { }, and the only testimony regarding how

many bits could possibly be input into that function contradicts Dr. Min's conclusion, because in response to questioning by Apple's counsel, the Qualcomm corporate witness testified that the { }. (*Id.* (citing JX-58C at 264-265 (Chizgi Dep.); CX-475C at 553, line 423).)

Whether the input is { }, 10 bits, or some other number of bits, ultimately does not matter, according to Apple, because it is undisputed that the Qualcomm baseband chips will only encode { }. (*Id.*) Therefore, no matter how many bits are input to that controller, the codeword that is output will only "correspond" to a { } and is outside the scope of the claims, which require a codeword "corresponding to a 10 bit TFCI information input." (*Id.*) Dr. Min admitted that only {

}

(*Id.* (citing Tr. at 1257 (Min)).) This testimony, says Apple, is consistent with the explanation the Qualcomm corporate witness, Nathan Chizgi, provided at his deposition. Mr. Chizgi explained that {

}

Further with respect to claim 75, which requires a "controller for outputting a 30-bit codeword," Apple says Dr. Davis explained the Qualcomm source code shows that TFCI encoding function { } outputs a 32-bit codeword, not a 30-bit codeword. (*Id.* (citing Tr. at 2058 (Davis)).) Dr. Min does not dispute this, says Apple, because he testified that the { } outputs a 32-bit codeword. (*Id.* (citing Tr. at 617-613 (Min)).) Therefore, argues Apple, the Qualcomm baseband chips at issue in this Investigation do not practice for the same reasons that Apple does not infringe this claim. (*Id.*)

And further with respect to claim 82, Apple says that Dr. Min offered only conclusory testimony that the source code in Qualcomm's baseband processors shows a puncturer for puncturing as required by claim 82. (*Id.* (citing Tr. at 625-626 (Min)).) This fails to establish that those chips contain software the punctures two bits from the 32-bit codeword as required by claim 82. (*Id.*) As Dr. Davis testified, Dr. Min did not provide any evidence that there is a hardware or software agent for puncturing in the Qualcomm baseband processors. (*Id.* (citing Tr. at 2059 (Davis)).) Apple notes that Samsung did not even cross-examine Dr. Davis on this point. (*Id.*)

Apple says that Samsung's argument that Order No. 65 bars Apple from arguing that the Qualcomm baseband processors do not practice the claims because they encode { } is erroneous for two reasons: (1) it ignores the language of that order, where it states: "It is noted that the underlying Qualcomm evidence is not stricken, and Respondent is free to explore this evidence with Dr. Min on cross-examination. Should Respondent choose to do so, however, Dr. Min will be permitted to offer responsive opinions." (RRBr. at 18 (citing Order No. 65 at 7).)

Apple says that Order No. 65 was followed and pursuant thereto, Dr. Davis did not testify that Qualcomm baseband processors only encode { }, but Apple submitted through unobjected-to deposition designations the evidence from Qualcomm showing that its baseband processors encode { }. (*Id.* at 19 (citing JX-58C at 258-260 (Chizgi Dep.)).) Also, on cross-examination, Dr. Min conceded the indisputable fact that the Qualcomm baseband processors can encode { }. (*Id.* (citing Tr. at 1257 (Min)).) Apple says that Samsung chose not to ask Dr. Min a single question about the '348 patent on redirect examination, effectively conceding that Dr. Min could not contest the fact that Qualcomm's baseband processors only { }. (*Id.* (citing Tr. at 1271-1300 (Min)).) Thus, Apple says it did exactly what Order No. 65 said Apple was permitted to do. Apple also says that even Apple were now barred from addressing the facts, Staff would not be and Staff has advanced the same position as Apple on this issue, also concluding that the Qualcomm-based products do not practice this element because they { }. (*Id.* (citing SBr. at 49).)

In Staff's view, none of the Samsung '348 domestic products practice claim 75 of the '348 patent, because, as in the Apple Accused Products, in each case the controller responsible for encoding TFCI information outputs a 32-bit TFCI codeword, rather than the 30-bit codeword specified in the claim. (SBr. at 46.) Also, certain domestic industry products use { }, rather than the 10-bit TFCI input disclosed in claim 75. (*Id.*)

Staff says that it is undisputed that each of the asserted domestic-industry products contains a TFCI encoding apparatus used to communicate within a CDMA mobile communications system. (*Id.* (citing JXM-1 at 45:52-54).) All of the asserted domestic-industry products are UMTS devices that are compliant with 3GPP TS 25.212 rel.99 or later. (*Id.* (citing Tr. at 602 (Min)).) Certain domestic industry products, such as the Galaxy S 4G, {

}, while others, such as the Gravity Smart and the Impression Full Qwerty Touch, run on { }. (*Id.* at 46-47 (citing Tr. at 595-598 (Min)).) All, however, are capable of operating on a CDMA-based telecommunications network. (*Id.* at 47.)

In Staff's view, the Samsung domestic-industry products that use Qualcomm baseband processors do not practice claim 75 because they do not have a controller that accepts a "10-bit TFCI information input" or outputs "a 30 bit codeword[.]" (*Id.* (citing JXM-1 at 45:55-58).) Staff notes that Dr. Min admitted on cross-examination that Samsung products using Qualcomm baseband processors, such as the Gravity Smart and the Impression Full Qwerty Touch, contain a controller that encodes a { } into a 32-bit TFCI codeword. (*Id.* (citing Tr. at 1254-57 (Min) ("{ }, 1244-45 (TS 25.212 standard calls for padding if TFCI information is less than ten bits).) Staff notes that in the Qualcomm-based products, TFCI information originates in the baseband processor as part of the {

}.) Staff says that while

Qualcomm-based domestic industry products have a controller that performs TFCI encoding, these products do not practice claim 75 of the '348 patent because the encoding process uses neither ten bits of TFCI information nor a 30-bit output codeword. (*Id.*)

Staff concludes that Samsung's domestic-industry products that use the Qualcomm baseband processor do not practice claim 82 because they use { }, rather than the 10-bit TFCI information disclose in claim 82.

The Administrative Law Judge concludes that the domestic-industry products that incorporate the Qualcomm baseband processor do not practice claims 75 or 82 of the '348 patent, because they use { } rather than 10 bits, for the reasons given by Apple and Staff, as discussed above, and based on the evidence they cite. The Administrative Law Judge also concludes that the puncturing limitation is not met, either, for the same reasons given for finding that the Accused Products do not infringe this limitation. The reasons given above with respect to the requirements for demonstrating the puncturing element apply here as well. The Administrative Law Judge rejects Samsung's request to strike pertinent Apple's arguments, concluding that those arguments and the evidence that Apple elicited on cross-examination of Dr. Min, as well as the deposition testimony given by Qualcomm's corporate representative, do not violate Order No. 65.

b) ST-Ericsson Baseband Processor Products

Samsung says the Galaxy S 4G (SGH-T959V), Infuse 4G (SGH-I997), Exhibit 4G (SGH-T759), and Sidekick 4G (SGH-T839) each comprises a {

}. (CBr. at 57-58 (citing JX-0029C (Son Dep.) at 45; CX-842; Tr. (Min) at 597-598; JX-51 (Kim Dep.) at 57).) These products are analyzed together and referred to as the "DI ST-Ericsson Products." Samsung maintains that the DI ST-Ericsson Products all support UMTS and

communicate on the UMTS system. (*Id.* at 58 (citing JX-29C (Son Dep.) at 67; Tr. (Min) at 602, 633-634).) In order to communicate on the UMTS system, the DI ST-Ericsson Products must comply with the 3GPP standards, including TS 25.212 at TS 25.211 (*Id.* (citing Tr. (Min) at 602-603, 633-634).) Therefore, according to Samsung, the prior analysis regarding TS 25.212 and TS 25.211 applies to the DI ST-Ericsson Products. (*Id.*)

The DI ST-Ericsson Products implement the invention in { }, argues Samsung. (*Id.* (citing Tr. (Min) at 635-636).) For example, the DI ST-Ericsson Products generate a 32-bit codeword from a 10-bit TFCI input and then puncture two bits from the generated codeword to create a 30-bit codeword output. (*Id.* (citing Tr. (Min) at 636-637, 640).) The DI ST-Ericsson Products first encode the 10-bit TFCI information input into a 32-bit TFCI codeword, {

} (*Id.* (citing CX-1193C).)

{

} disclosed in the '348 patent with the design implementation of moving bits at positions 0 and 16 to the bottom of the encoding table. (*Id.* (citing Tr. (Min) at 639).) This is shown in the illustration below.

Bit Position	W1	W2	W4	W8	W16	All 1	M1	M2	M4	M8
1	1	0	0	0	0	1	0	0	0	0
2	0	1	0	0	0	1	1	0	0	0
3	1	1	0	0	0	1	0	0	0	1
4	0	0	1	0	0	1	1	0	1	1
5	1	0	1	0	0	1	0	0	0	1
6	0	1	1	0	0	1	0	0	1	0
7	1	1	1	0	0	1	0	1	0	0
8	0	0	0	1	0	1	0	1	1	0
9	1	0	0	1	0	1	1	1	1	0
10	0	1	0	1	0	1	1	0	1	1
11	1	1	0	1	0	1	0	0	1	1
12	0	0	1	1	0	1	0	1	1	0
13	1	0	1	1	0	1	0	1	0	1
14	0	1	1	1	0	1	1	0	0	1
15	1	1	1	1	0	1	1	1	1	1
17	1	0	0	0	1	1	1	1	0	0
18	0	1	0	0	1	1	1	1	0	1
19	1	1	0	0	1	1	1	0	1	0
20	0	0	1	0	1	1	0	1	1	1
21	1	0	1	0	1	1	0	1	0	1
22	0	1	1	0	1	1	0	0	1	1
23	1	1	1	0	1	1	0	1	1	1
24	0	0	0	1	1	1	0	1	0	0
25	1	0	0	1	1	1	1	1	0	1
26	0	1	0	1	1	1	1	0	1	0
27	1	1	0	1	1	1	1	0	0	1
28	0	0	1	1	1	1	0	0	1	0
29	1	0	1	1	1	1	1	1	0	0
30	0	1	1	1	1	1	1	1	1	0
31	1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	1	0	0	0	0
16	0	0	0	0	1	1	1	0	0	0

JXM-0001 ['348 Patent] at 11:1-23

{ } (*Id.* at 59.) The encoding table on the left is derived from the '348 sequences and the { } (*Id.* (citing Tr. (Min) at 638).) Since the DI ST-Ericsson Products are UMTS capable and are compliant with TS 25.212 rel. 99 and later, the generated TFCI codeword { } is mapped to the slots of the radio frame. (*Id.* at 59-60 (citing Tr. (Min) at 640).) The codeword is mapped such that only 30 bits out of the generated

32 bits in each TFCI codeword are transmitted. (*Id.* at 60 (citing Tr. (Min) at 640).) The remaining bits are punctured by reason of being ignored. (*Id.* (citing Tr. (Min) at 640).)

Samsung contends that the DI ST-Ericsson Products practice the "controller" limitation of claim 82 because they are UMTS devices and therefore are required to practice the standard set forth in TS 25.211 and TS 25.212 (citing Tr. (Min) at 602, 633-634) and (2) ST-Ericsson source code demonstrates this claim is practiced. (*Id.* (citing Tr. (Min) at 604-605, 633-634).)

(1) *Whether the DI ST-Ericsson Products Practice Claim 82*

(a) *"a controller for outputting a 32-bit codeword...that corresponds to a 10 bit TFCI information input to the controller"*

Samsung says that on the face of the source code, the DI ST-Ericsson source code conforms to the standard in precisely the same manner as disclosed in section 4.3.3 of TS 25.212. (CBr. at 60 (citing CX-1193C at S-ITC-C-00004146).) The claimed controller is the chip that runs the {

} accepts a 10-bit TFCI information input, and the output {

} outputs a 32-bit TFCI codeword. (*Id.*) Each 10-bit TFCI information input necessarily corresponds to a 32-bit TFCI codeword, because the {

} generates a unique 32-bit codeword for each 10-bit TFCI information input to the controller. (*Id.* (citing Tr. (Min) at 637).)

(b) *"a 10 bit TFCI information input to the controller from a plurality of possible 10 bit TFCI information"*

Samsung says that each of the DI ST-Ericsson Products practices this limitation. (CBr. at 61 (citing Tr. (Min) at 636-637).) The ST-Ericsson source code utilized a 10-bit TFCI information input, {

} (*Id.*) Each of the bits in this input can be one of two values, 0 or 1. Therefore, the TFCI information input can be one of many possible values. (*Id.*)

(c) *"a 32 bit codeword from among a plurality of 32 bit codewords"*

Samsung says the ST-Ericsson code demonstrates that the DI ST-Ericsson Products generate a different 32-bit output for each different 10-bit input, so the resulting 32-bit codeword is from more than one possible 32-bit codeword. (*Id.* (citing Tr. (Min) at 636-638).) Utilizing { }, the DI ST-Ericsson Products generate a different 32-bit output for each input, so the codeword is from more than one possible 32-bit codeword. (*Id.*)

(d) *"a puncturer for puncturing two bits from the 32 bit codeword output by the controller"*

Samsung claims that the DI ST-Ericsson Products satisfy this limitation, since they are UMTS capable and are compliant with TS 25.212, the generated codeword from { } is mapped to the slots of a radio frame. (*Id.* (citing Tr. (Min) at 640).) The codeword is mapped such that only 30 bits out of the generated 32 bits in each TFCI codeword is transmitted. (*Id.* (citing CX-1099 at CX-1099.0049).) The last two bits are ignored during this mapping process and therefore the ST-Ericsson source code demonstrates that the DI ST-Ericsson Products puncture two bits from the 32-bit codeword output by the controller. (*Id.* at 61-62.)

(e) *"outputting a 30 bit codeword"*

Samsung says that the DI ST-Ericsson Products practice this limitation because when they map 30 bits out of the 32 bit codeword into a transmission frame, 30 coded TFCI bits are transmitted to the base station. (*Id.* (citing CX-1099 at CX-1099.0049; Tr. (Min) at 640).) The DI ST-Ericsson Products necessarily output a 30-bit codeword when it transmits 30 bits. (*Id.*)

(f) *"each of the two bits being punctured at a predetermined position"*

Samsung says the DI ST-Ericsson Products practice this element because section 4.3.5 demonstrates that bits at section 4.3.5 demonstrates that bits at positions 30 and 31 are two bits that are not mapped to the transmission frame and are not transmitted. (*Id.* (citing CX-1099 at CX-1099.0049).) Samsung contends that bit positions 30 and 31 are predetermined. (*Id.*)

(g) *"a 30 bit codeword that is equivalent to the 32 bit codeword output by the controller"*

Samsung says the DI ST-Ericsson Products meet this limitation. (*Id.* (citing Tr. (Min) at 641-642).) According to Samsung, { } generates codewords with a minimum distance of 12. (*Id.* at 62-63 (citing Tr. (Min) at 641-642).) There are a plurality of possible 32-bit codewords, because each possible 10-bit TFCI is encoded into a unique 32-bit codeword; and each of these differ in at least 12 bit positions, because the minimum distance is 12. (*Id.* at 63.) Eliminating two bits still results in a plurality of unique codewords. Therefore the 30-bit codeword is equivalent to the 32-bit codeword output by the controller. (*Id.*)

(2) *Whether the DI ST-Ericsson Products Practice Claim 75*

Samsung notes that claim 75 differs from claim 82 in that the controller generates a 30-bit codeword instead of a 32-bit codeword. (CBr. at 63 (citing Tr. (Min) at 642-643).) Samsung contends that the claimed controller in the DI ST-Ericsson Products encodes the 10-bit TFCI information input into a 32-bit codeword using the entity { } and punctures two bits from the 32-bit codeword in accordance with TS 24.212, section 4.3.5, to result in a 30-bit codeword. (*Id.* (citing Tr. (Min) at 636-637, 642-643).) With respect to claim 82, the controller and puncturer were considered as two separate components within the baseband processor. (*Id.*) However, for claim 75, the controller includes both the encoding and

puncturing functions. (*Id.*) This difference between claim 75 and claim 82 does not affect the analysis of whether the DI ST-Ericsson Products practice the claim, says Samsung. (*Id.*)

(a) *"a controller for outputting a 30 bit codeword... that corresponds to a 10-bit TFCI information input to the controller"*

Samsung says that for the same reasons previously set forth by Samsung, discussed above, the DI ST-Ericsson Products satisfy this limitation. (CBr. at 64.) The ST-Ericsson source code confirms that the DI ST-Ericsson Products conform to the standard in TS 25.212. The { }, takes a 10-bit TFCI and encodes the TFCI into a 32-bit TFCI codeword. (*Id.* (citing Tr. (Min) at 636-637; CX-1193C).) Because the DI ST-Ericsson Products are UMTS capable and compliant with TS 25.212, the DI ST-Ericsson Products map 30 bits out of the 32-bit TFCI codeword into the transmission frame. (*Id.* (citing Tr. (Min) at 640).) Therefore, according to Samsung, the ST-Ericsson source code demonstrates that the controller takes a 10-bit TFCI information input and outputs a 30-bit TFCI codeword. (*Id.*)

(b) *"a 10 bit TFCI information input to the controller from a plurality of possible 10 bit TFCI information"*

Samsung says that for the same reasons previously set forth by Samsung, discussed above, the DI ST-Ericsson Products satisfy this limitation. (*Id.*)

(c) *"a 30 bit codeword from among a plurality of 30 bit codewords"*

For reasons previously set forth, as discussed above, Samsung says that the DI ST-Ericsson Products satisfy this limitation. Samsung says there are a plurality of possible 32-bit codewords, each of which differs in at least 12 bit positions, because the minimum distance is 12. (*Id.* at 65.) Therefore, eliminating two bits still results in a plurality of unique codewords, and the resulting 30-bit codeword is from more than one possible 30-bit codeword. (*Id.*)

(d) *"a 30 bit codeword output by the controller is equivalent to a 32 bit codeword that corresponds to the 10 bit TFCI information input to the controller"*

Samsung says that for the same reasons previously set forth, discussed above, the DI ST-Ericsson Products satisfy this limitation. (*Id.* (citing Tr. (Min) at 642-643).)

Apple says that Samsung failed to present any source code or other documentary evidence at the hearing that the ST-Ericsson Baseband Processor Products meet two limitations: (1) a controller for outputting a 30-bit codeword (claim 75) and (2) a puncturer for puncturing the 32-bit codeword (claim 82). (RBr. at 48-49 (citing Tr. (Min) at 1257-59).) Nor did Samsung submit any testimony from any fact witness with knowledge of ST-Ericsson's products. (*Id.* at 49.) Therefore, according to Apple, Samsung failed to meet its burden to prove the technical prong of domestic industry with respect to the ST-Ericsson Baseband Processor Products. (*Id.*)

As far as claim 75, Apple says the evidence demonstrated that these products do not include a "controller for outputting a 30 bit codeword." (*Id.*) Apple says that Dr. Min admitted that the ST-Ericsson source code shows the controller outputs a 32-bit codeword:

> Q. So 10 bits in, unencoded; 32 bits encoded out?
>
> A. That's right.
>
> Q. And how does that related to the controller element?
>
> A. That's precisely what the controller element is. You have taken ten bits and make it into a codeword that is 32 bits long.

(*Id.* (citing Tr. (Min) at 637).) Apple says that Dr. Min admitted that he had not identified any source code that showed the ST-Ericsson products output a 30-bit codeword. (*Id.* (citing Tr. (Min) at 1257-59).) Samsung, says Apple, failed to show evidence of this claim element. (*Id.*)

As regards claim 82, Apple says Dr. Min admitted that he was unable to identify any source code for the ST-Ericsson processors that practice the "puncturer for puncturing"

limitation. (*Id.* (citing Tr. (Min) at 640-641).) Apple says that Samsung's reliance on section 4.3.5 of the ETSI standard fails because that section does not require or even suggest the use of a puncturer for puncturing. (*Id.*) Lacking any evidence of any software or hardware for puncturing, Samsung has failed to meet its burden to prove the technical prong with respect to ST-Ericsson Baseband Processor Products, argues Apple. (*Id.*)

Staff says that the evidence fails to show that the domestic industry products that use the ST-Ericsson baseband processor practice claim 75, because they do not have a controller that outputs "a 30-bit codeword[.]" (SBr. at 48 (citing JXM-1 at 45:55-56).) Staff points out that Dr. Min testified that Samsung products that use the { }, such as the Galaxy S 4G, encode a 10-bit TFCI input into a 32-bit TFCI codeword, and in particular, the file { } that accepts ten bits of TFCI information and output a 32-bit TFCI codeword. (*Id.* (citing Tr. (Min) at 635-637; CX-1193C at S-ITC-C00004146).) The encoding is based on a set of 32-bit {

} and discussed previously by Staff. (*Id.* (citing Tr. (Min) at 638-639; CX-1193C at S-ITD-C000004147 to -4148).)

Staff says that even though the domestic-industry products with ST-Ericsson baseband processors have a controller that performs TFCI encoding, claim 75 calls for "a controller for outputting a 30 bit codeword from a plurality of 30 bit codewords[.]" (*Id.* (citing JXM-1 at 45:55-56).) Because the controller in the Samsung products using the { } processor outputs a 32-bit codeword, Staff concludes that these domestic-industry products do not practice claim 75 of the '348 patent. (*Id.*)

Staff concludes that the Samsung domestic-industry products that use an ST-Ericsson processor contain a controller that encodes a 10-bit TFCI input into a 32-bit codeword. (*Id.* at 50 (citing Tr. (Min) at 635-637; CX-1193C at S-ITC-C00004146).) Staff says the evidence indicates that also contain a puncturer that removes two bits from the encoded 32-bit TFCI codeword and outputs a 30-bit codeword. (*Id.*) Specifically, argues Staff, the 32-bit codeword generated in { } is mapped to the slots of a radio frame in such a manner that only first thirty bits are transmitted. (*Id.* (citing Tr. (Min) at 640-641 (drawing inference from compliance with 3GPP standard).) This, reasons Staff, is consistent with the 3GPP standard. (*Id.* (citing CX-1099 § 4.3.5.1 (3GPP TS 25.212 (Sept. 2006).) Because it is always the same two bits that are not transmitted, b_{30} *and* b_{31}, Staff submits that the puncturing takes places at predetermined positions. (*Id.*)

The Administrative Law Judge concludes that the evidence does not demonstrate that the domestic-industry products that incorporate the ST-Ericsson baseband processor practice claim 82 with respect to the puncturing limitation, for the same reasons discussed above with respect to the finding that the Accused Products do not infringe claim 82. The same reasoning set forth there is incorporated here, inasmuch as Dr. Min's basis for finding that this limitation is met is based on the same reasoning. While Staff reasons that because the same bits are not transmitted this evidences that puncturing takes place at predetermined positions, the Administrative Law Judge finds otherwise: that bits b_{30} *and* b_{31} are not transmitted is only an artifact, or a collateral consequence, of the fact that only 30 bits are transmitted. This does not demonstrate that there is disclosed or present a puncturer for puncturing predetermined bits.

For the foregoing reasons, as well as the additional reasons put forth by Apple that have not been specifically mentioned, the Administrative Law Judge concludes that the evidence fails

to demonstrate that the asserted domestic-industry products practice the asserted claims of the '348 patent.

2. '644 Patent.

Samsung claims that all of its products that comply with the HSUPA standard practice claims 9 and 13 of the '644 patent. (CBr. at 117 (citing Tr. (Min) at 694-695, 802-803).) According to Samsung, the Samsung Gravity Smart and Samsung Dart are representative products because they are HSUPA capable and contain {

}. (*Id.* (citing Tr. (Min) at 694-695; CX-836C).) The relevant source code in the {

}, says Samsung. (*Id.* (citing Tr. (Min) at 802-803).) Therefore, the same reasons previously advanced by Samsung in connection with Samsung's allegations that the Accused Products infringe claims 9 and 13 of the '644 patent also support a finding that Samsung's domestic industry products practice those claims. (*Id.* (citing Tr. (Min) at 696).) Samsung says that the citations to the domestic-industry {

}, was previously cited in Samsung's analysis and arguments in support of its allegations of infringement. (*Id.*)

Apple agrees with Samsung insofar as the statement that the {

} used in the accused iPhone (AT&T). (RBr. at 103-104 (citing Tr. (Min) at 801, (Stark) 2311).) Apple maintains that Samsung's domestic-industry products, the Gravity Smart and the Dart, do not practice the '644 claims for the same reasons that the iPhone 4S (AT&T) does not. (*Id.* at 104 (citing Tr. (Stark) at 2311-12).) Furthermore, according to Apple, Samsung's corporate representative with respect to Samsung's domestic-industry products was unable to identify any

component or source code with the Gravity Smart or Dart that practices any part of the claimed limitations. (*Id.* (citing JX-29C (Son Dep.) at 45-46, 54-55, 58, 64).) Apple says these facts and arguments apply equally to all other domestic-industry products containing the {

}. (*Id.*)

Staff advises that all parties agree that if the Qualcomm processor in the Apple 4S infringes claim 9 of the '644 patent it necessarily follows that Samsung's domestic-industry products practice that claim as well; and conversely, if the Apple 4S does not infringe claim 9, it necessarily follows that Samsung's domestic-industry products do not practice that claim. (SBr. at 81.)

The Administrative Law Judge agrees with the parties that, because of similarities of the baseband chips that are included in the Accused Products and in the Domestic Industry Products, that the outcome has to be the same for determining infringement and the technical prong of the domestic industry requirement. Therefore, for the reasons previously given in concluding that the Accused Products do not infringe the '644 patent, the Administrative Law Judge concludes that Samsung's domestic-industry products do not practice the asserted claims of the '644 patent.

3. '980 Patent.

Samsung alleges that its products listed in CDX-03.90 practice the '980 patent. (CBr. at 164.)

(CDX-03.90.) For purposes of this Section regarding the '980 patent, said products will be referred to as the "DI Products." Samsung says that the Galaxy S 4G ("Galaxy S") is representative of the DI Products because it runs Android OS version 2.2 ("Froyo") and "practices the '980 patent in the same way as the other domestic industry products." (CBr. at 164; Tr. at 2141 (Cole).)

a) Claim 5

Samsung says that the Galaxy S is able to perform all of the steps of claim 5. (CBr. at 165-171.) Staff supports Samsung's technical domestic industry allegations with respect to claim 5 (SBr. at 101-103), but Apple disputes elements "5C" and "5D." (RBr. at 173.)

Claim 5 of the '980 patent reads as follows:

5[A]. A method for dialing a phone number in a smart phone having random access memory (RAM) and both personal digital assistant (PDA) and mobile phone functions during operation of a PDA function, comprising the steps of:

[5B] loading an operating system (OS) program for said PDA function;

[5C] loading a phone program for editing and dialing a phone number along with displaying a phone editor and dialing icon if said PDA function is requested by a user;

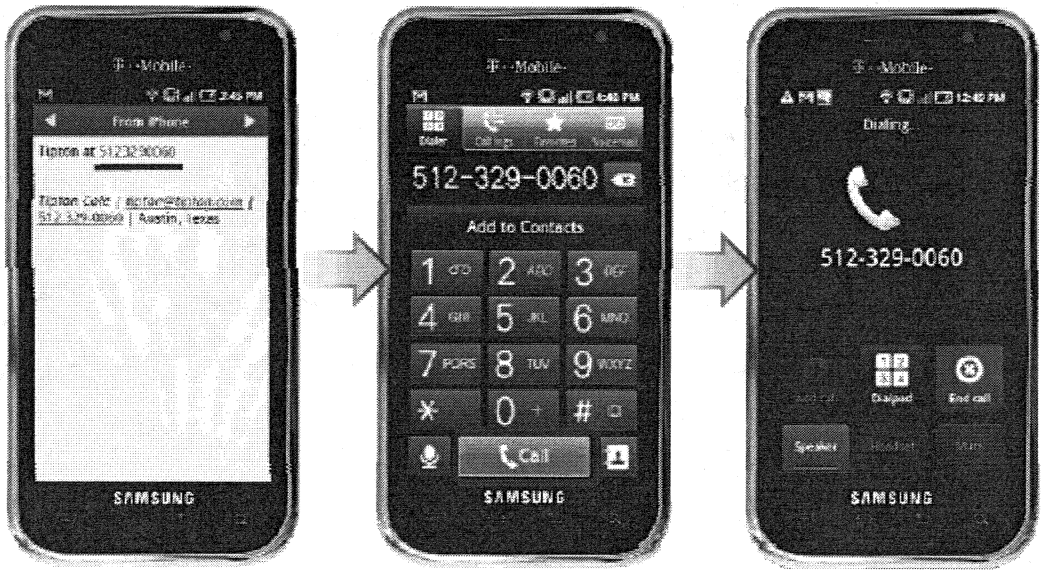
[5D] executing said phone program if said user selects a phone number during operation of said PDA function;

[5E] storing an identifying name designated for the selected phone number into a phone book; and

[5F] dialing the selected phone number.

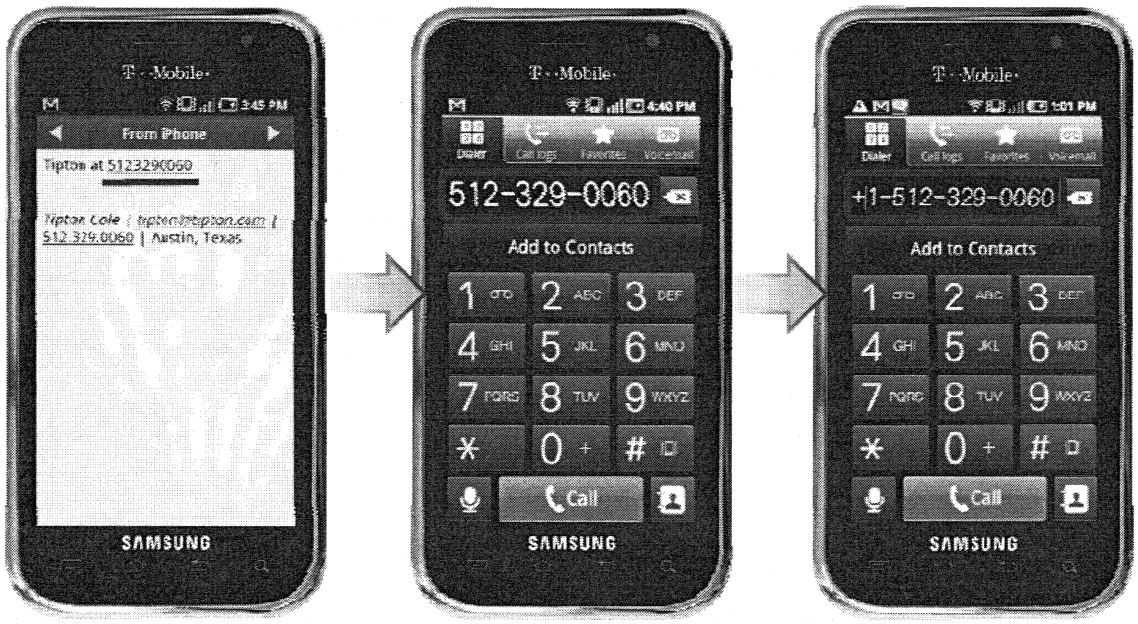
(JXM-5 at 4:36-58.)

Mr. Cole explained with respect to the Galaxy S that a user running the email application can press on a phone number highlighted and underlined in an email. (Tr. at 2416-17.) This results in a "dialer screen." (*Id.*) The user may press the call button in the dialer screen, causing the phone to dial the number. (*Id.*)

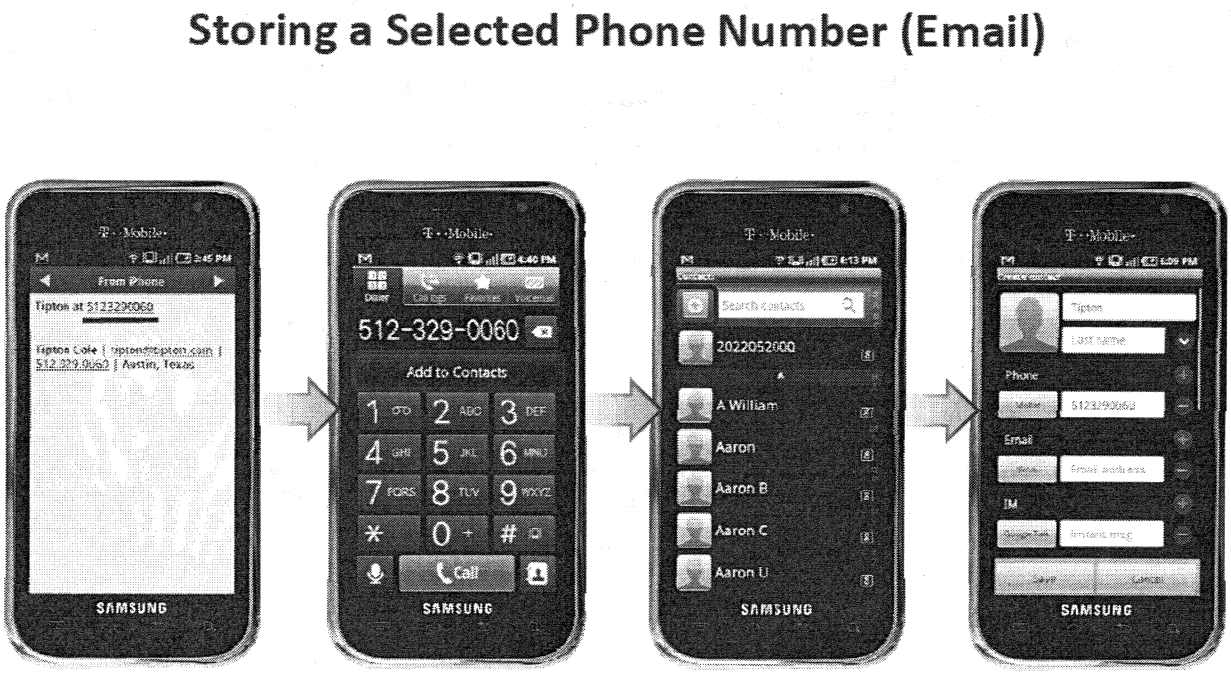


(CDX-03.92. *See also* CPX-0001.) Mr. Cole explained that a user may also modify the selected phone number while in the same "dialer screen." (Tr. at 2417; CDX-03.93.)

Editing a Selected Phone Number (Email)



(CDX-03.93 (showing addition of a "1" in front of the number). *See also* CPX-0001.) Mr. Cole also demonstrated that it is possible to add the selected phone number to the "contacts list" from the same "dialer screen." (Tr. at 2417-18.)



(CDX-03.94. *See also* CPX-0001.) He showed that other programs on the Galaxy S phone, such as the web browser and text messaging application, operate in a similar way. (Tr. at 2418-20; CDX-3.95-98.) According to Mr. Cole, the Galaxy S and therefore the DI Products are able to meet all the limitations of claim 5 of the '980 patent. (Tr. at 2420-2446. *See also* CBr. at 165-171 and the evidence cited therein.) Staff agrees. (SBr. at 101-103.) Apple does not appear to directly refute Samsung's technical domestic industry assertions with respect to the preamble "5A" and steps "5B," "5E," and "5F." (RBr. at 173-181.)

The Administrative Law Judge has reviewed the arguments and evidence relied on by Samsung and Staff and finds that the Galaxy S is a smart phone able to dial a phone number and having RAM; has both PDA and mobile phone functions during operation of a PDA function; is able to load an OS for said PDA function; is able to store an identifying name for a selected phone number into a phone book; and is able to dial the selected phone number, such that the preamble "5A" and steps "5B," "5E," and "5F" of claim 5 have been met. (Tr. at 2416-18, 2421;

CPX-0001; CX-595; CX-597.) The Administrative Law Judge further finds that Samsung has shown that the Galaxy S is able to perform both steps "5E" and "5F" (unlike the accused iPhones, which as noted above can only perform them in isolation). (CDX-03.94; Tr. at 2416-18. *See also* CPX-0001.)

With respect to disputed element "5C," loading[88] a phone program for editing and dialing a phone number along with displaying a phone editor and dialing icon if said PDA function is requested by a user, Samsung argues that "the phone program in the DI Products is the software that provides the claimed functionality. . .i.e., editing and dialing a phone number selected in a PDA function." (CBr. at 167.) Mr. Cole testified that this program is "composed in parts of multiple pieces of other software on the Galaxy phone." (Tr. at 2424.) {

}

(CDX-03.108C.) Mr. Cole explained that the "Android Application Framework" is analogous to the iPhone application Springboard because "it cooperates with the operating system to manage the transition from one application to another." (Tr. at 2425.) He further explained that the { } function is analogous to the iPhone Data Detectors because it "inspects

[88] The Administrative Law Judge found that one of ordinary skill in the art would have understood "loading" in claim 5 of the '980 patent to mean "copying or transferring into memory." (Markman Order at 81-82.)

the PDA function's text to determine if there's a phone number present and, if so, to highlight that number." (*Id.*) {

}

(CDX-03.109C; Tr. at 2426 (Cole).) Mr. Cole explained that the "phone/dialer" represents "a part of the phone application or the telephone functions, mobile phone functions of the smartphone." (Tr. at 2426.) He said the phone application "is loaded upon demand by the user" when the user presses the phone icon on the bottom of the home screen, claiming that "[t]his is to represent the fact. . . when the phone number is pressed in the Web page, that it will cause the phone program to load." (Tr. at 2427; CDX-03.110C.) According to Samsung

> [w]hen in a PDA application, if the user selects a linkable phone number, either by (a) a short press or (b) a long-press on the linkable number, the device invokes the Phone application and { } (Cole. Tr. 2425:23-2426:4, 2426:5-2430:9; CDX-03.108C-119C.) The Phone application that is loaded in response to (a) and (b) includes { }. (Cole 2427:1-2429:13; CX-1482C, RX-0818C, CX-1400C, CX-1488C, CX-1679C, CX-1201C; CDX-03.112C.)

{

} (*See* Cole Tr. 2430:10-15.)

(*Id.* at 169-170 (emphasis added).) Mr. Cole testified that after reviewing the Galaxy S source code and deposition testimony of Samsung employee, Mr. Kim[90], he formed the opinion that "the phone program is loaded when you activate it from the web page." (Tr. at 2428-2432.)

According to Staff, "[t]he domestic industry products also 'load[] a phone program for editing and dialing a phone number' by automatically loading the "Phone" application after powering up the Galaxy S 4G. JXM-5 ('980 patent) at 4:42-43; Hearing Tr. at 2423:14-16 (Cole)." (SBr. at 101.) Staff does not provide an explanation of how the loading step is accomplished if the PDA function is requested by the user. If the Administrative Law Judge were to credit Staff's explanation of the evidence with respect to the loading step, the DI Products would not meet element "5C" of claim 5.

Apple responds, *inter alia*, that (i) Samsung abandoned its theories regarding its domestic industry contentions and presented a new, previously undisclosed theory at the hearing; (ii) Samsung has not presented any evidence[91] to support the claim that the Galaxy S is

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[89] Samsung does not explain the tie between the creation of an object such as "Intent" and loading. (CBr. at 170.) Are the objects the claimed "phone program"? Part of it? They are not so identified by Mr. Cole. (Tr. at 2424; CDX-03.108C.)

[90] It is noted that this underlying testimony is not in evidence; however, Mr. Cole was permitted to disclose what he relied on in forming his opinions. (Tr. at 2432.) CDX-03.119, which contains excerpts of Mr. Kim's deposition, has been disregarded.

[91] It is noted that Apple has not provided any evidence to directly contradict Mr. Cole on this point. Even if Apple had produced such evidence, Apple's argument that the Galaxy S is not representative of all DI Products really does not substantively impact technical domestic industry because this requirement only requires that an article practice a claim of the asserted patent. (See Section VII.A. above.) Thus if the Galaxy S alone had been found to practice claim 5 of the '980 patent, that would have been sufficient for the technical prong of the domestic industry

representative of the DI Products other than a conclusory statement by Mr. Cole; (iii) Samsung has not provided any fact witnesses to show how the DI Products work or that they satisfy the "loading," "executing," and "displaying" requirements of claim 5; and (iv) ten disparate software components are not a "program." (RBr. at 173-75, 179.) Apple faults Mr. Cole for failing to map source code to the claims or explain how it applies with respect to the Galaxy S. (*Id.* at 175.) Apple[92] cites to a variety of sources which do not appear to be in evidence to support their arguments regarding (i), which sources will be disregarded. (*See, e.g., id.* at 177 (referring to Mr. Cole's opening expert report and deposition).)

Having reviewed the record evidence and arguments submitted by the parties, the Administrative Law Judge concludes that Samsung has failed to show by a preponderance of the evidence that the DI Products meet step "5C" of claim 5 of the '980 patent. The Administrative Law Judge notes that while many of Apple's arguments relating to its claim that Samsung has shifted position with respect to the loading step inappropriately rely on documents not in evidence, a review of Samsung's Pre-Hearing Brief shows that Samsung quite bluntly stated that {

} (Samsung Pre-Hearing Brief at 88-90.) While Samsung stated that the claimed "phone program" was not limited to the phone or "dialer" applications in the DI Products, Samsung did not explain then what these other applications were. (*Id.* at 89.) Mr. Cole's hearing testimony, which was problematic and lacked credibility in

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requirement (although the economic prong could potentially have been impacted).

[92] Samsung does the same thing in its Reply Post-Hearing brief, citing extensively to expert reports which it "attached" to its brief. These reports are not in evidence and will likewise be disregarded here. As the parties are well aware, all impeachment and rebuttal based on these expert reports should have been carried out *on the record* when the pertinent experts were on the stand. This type of inclusion of evidence that was not in the record creates the opportunity for error and confusion, and the Administrative Law Judge intends to amend the Ground Rules and strictly bar such conduct in the future. Furthermore, to the extent that such attachments may have been cited or otherwise addressed elsewhere in this Initial Determination, it was either because the parties preserved certain issues by way of motions that were deferred or because no party objected to the citations such that it may not have come to the Administrative Law Judge's attention that a cited item was not in the record.

the manner noted above with respect to infringement, appears to both contradict and mutate Samsung's prior stated position and fails to adequately explain the operation of the DI Products during the "loading step."

For example, Mr. Cole testified that the phone program "loads" when a user pushes the phone icon on the home screen, yet Samsung said the phone program loads at startup. (*Compare* Samsung Pre-Hearing Brief at 88-90 and SBr. at 101 *with* Tr. at 2432 and CBr. at 169-170.) The Administrative Law Judge agrees with Apple that this contradiction appears to run afoul of Ground Rules 7.2 (contentions not set forth in Pre-Hearing Brief are waived) and 10.1 (limiting scope of Post-Hearing Brief). Furthermore, Mr. Cole's testimony leaves a gap because he does not explain what form of "loading" happens when a user pushes a phone number from within a PDA application as opposed to pushing the phone icon on the home screen, particularly as there are elements in play with respect to the former such as the { } ("AAF"). Mr. Cole testified that the { } and Samsung explained that the Galaxy S phone application { } (Samsung Pre-Hearing Brief at 88-90), leaving open the question as to whether the AAF merely moves already loaded and running applications such as the phone application from the background to the foreground. Indeed Mr. Cole appears to concede that only { }, but notably does not testify that one of ordinary skill in the art would have understood loading portions of a program to mean loading a program.[93] (Tr. at 2443 (Cole). *See also* Tr. at 2833-34 (Ingers).) The Administrative Law Judge concludes that just as with infringement, Samsung has failed to adequately or persuasively explain its shift in position regarding the loading step, let alone what the alleged

[93] (*See, e.g.,* Tr. at 2825 (Ingers) (testifying that persons of skill in the art "like to think of a program [as]. . . one executable file that gets executed and it has unique process IDs. . .").)