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Dated: February 15, 2011

Signature: /Robert T. Neufeld/
Atty. Reg. No. 48,394

Docket No. 13557.112021
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reexamination of:

Yellin et al.

Control No.: Not yet Assigned

Patent No.: 6,061,520

Examiner: Not Yet Assigned

Issue Date: May 9, 2000

Art Unit: Not Yet Assigned

For: METHOD AND SYSTEM FOR PERFORMING
STATIC INITIALIZATION

REQUEST FOR *EX PARTE* REEXAMINATION UNDER 37 C.F.R. § 1.510

Mail Stop Ex Parte Reexam
Attn: Central Reexamination Unit
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Sir:

King & Spalding, LLP (hereinafter, "Requester") submits, under the provisions of 37 C.F.R. § 1.510 *et seq.*, a Request for Reexamination (hereinafter, "Request") of claims 1-4 and 6-23 of U.S. Patent No. 6,061,520 (hereinafter "the '520 patent") entitled "Method and System for Performing Static Initialization," issued to Yellin et al. on May 9, 2000. The '520 patent is provided as Exhibit 1 to the Request.

In support of its request, Requester provides the following:

- The \$2520.00 fee for requesting *ex parte* reexamination set forth in 37 C.F.R. § 1.20(c)(1) (37 C.F.R. § 1.510(a));

- A statement pointing out each substantial new question of patentability based on prior patents and printed publications (37 C.F.R. § 1.510(b)(1));
- An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested (37 C.F.R. § 1.510(b)(2));
- A copy of every patent or printed publication relied upon or referred to in paragraphs (b)(1) and (b)(2) of 37 C.F.R. § 1.510, accompanied by an English language translation of all the necessary and pertinent parts of any non-English language patent or printed publication (37 C.F.R. § 1.510(b)(3));
- A copy of the entire patent including the front face, drawings, and specification/claims (in double column format) for which reexamination is requested, and a copy of any disclaimer, certificate of correction, or reexamination certificate issued in the patent. All copies must have each page plainly written on only one side of a sheet of paper ((37 C.F.R. § 1.510(b)(4)) (Exhibit 1); and
- A certification that a copy of the request has been served in its entirety on the patent owner at the address as provided for in 37 C.F.R. § 1.33(c). The name and address of the party served must be indicated. If service was not possible, a duplicate copy must be supplied to the Office ((37 C.F.R. § 1.510(b)(5)).

Pursuant to 35 U.S.C. § 303, the prior art references discussed in this Request raise “substantial new questions of patentability” with respect to claims 1-4 and 6-23 of the ‘520 patent.

TABLE OF CONTENTS

TABLE OF CONTENTS	3
I. INTRODUCTION.....	4
II. STATEMENT UNDER 37 C.F.R. § 1.510 (B)(1) POINTING OUT SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY.....	5
A. OVERVIEW OF THE ‘520 PATENT	5
B. ASPECTS OF THE LAW GOVERNING REEXAMINATION.....	8
1. <i>Citation of prior art</i>	8
2. <i>“Old” prior art can raise a significant new question of patentability</i>	8
3. <i>Obviousness standard under KSR</i>	9
4. <i>Prior art references need not be enabling in an obviousness inquiry</i>	10
5. <i>Claims of the patent are to be broadly construed</i>	11
C. EVIDENTIARY STANDARDS.....	11
D. PRIOR ART REFERENCES RELIED UPON IN THIS REQUEST.....	11
E. SUPPORTING DOCUMENTS DISCUSSED IN THIS REQUEST	12
F. CURRENT LITIGATION.....	12
G. IDENTIFICATION OF SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY	12
H. OVERVIEW OF SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY	13
III. DETAILED EXPLANATION UNDER 37 C.F.R. § 1.510(B)(2) OF THE PERTINENCY AND MANNER OF APPLYING THE CITED PRIOR ART TO EVERY CLAIM FOR WHICH REEXAMINATION IS REQUESTED.....	19
A. REJECTIONS OF CLAIMS	19
1. <i>Claims 1-4, 6-13, 15, 16, and 18-23 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by the Lewis reference.</i>	19
2. <i>Claims 1-4 and 6-23 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Cierniak.</i>	19
3. <i>Claims 1-4 and 6-23 are unpatentable under 35 U.S.C. § 103(a) as rendered obvious by Cierniak in view of Dyer.</i>	20
IV. CONCLUSION.....	20

I. INTRODUCTION

Requester seeks reexamination of claims 1-4 and 6-23 of the ‘520 patent (Exhibit 1) under 35 U.S.C. §§ 302-307 and 37 C.F.R. § 1.510 *et seq.* The application for the ‘520 patent was filed on April 7, 1998. The ‘520 patent is assigned to Sun Microsystems, Inc.

The claims of the ‘520 patent relate to a method and system for “initializing static arrays by reducing the amount of code executed by the virtual machine to statically initialize an array.” *See* ‘520 patent, Abstract. Specifically, the Examiner allowed the ‘520 patent because its claims include the limitation of “play execution” of code, or, “simulating the code without execution.” *See* Notice of Allowability (Jan. 4, 2000) (attached as Exhibit 2). However, this limitation was well-known prior to the filing of the application for the ‘520 patent: as described in further detail below, the Lewis reference discloses the execution of computer code in order to “maintain a running simulation of the MCode machine’s stack.” Similarly, the Cierniak reference discloses the process of “symbolically execut[ing]” computer code in a Java virtual machine. Additionally, the Dyer reference discloses sections of code which allow for “static initializer(s)” and the manipulation of code using “inline code inside constructors.”

The Requester has identified at least three (3) printed publications that, alone or in combination, either anticipate or render obvious claims 1-4 and 6-23 of the ‘520 patent. The prior art printed publications were either not cited to or not considered by the Examiner during prosecution of the ‘520 patent or they pose a significant new question of patentability based on the prosecution history of the ‘520 patent, and they are not cumulative to information cited to or considered by the Examiner during prosecution of the ‘520 patent. These printed publications anticipate or render obvious each element of the ‘520 patent, including the purportedly novel application of the “play execution” of computer code that was the basis for the ‘520 patent’s allowability.

Accordingly, at least in view of these listed prior art references and the substantial new questions of patentability that they raise, the Requester respectfully requests the issuance of an order for reexamination, and further requests that claims 1-4 and 6-23 be canceled. The Requester respectfully requests that this Request be afforded special dispatch in accordance with 35 U.S.C. § 305 and 37 C.F.R. § 1.550.

The Requester further respectfully requests that the Director provide an order of action dates to accompany the decision ordering reexamination of the '520 patent.

II. STATEMENT UNDER 37 C.F.R. § 1.510 (B)(1) POINTING OUT SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY

The new prior art references not previously considered by the Examiner raise substantial new questions of the patentability of claims 1-4 and 6-23 of the '520 patent. Section II.A provides an overview of the '520 patent. Section II.B summarizes certain aspects of the law regarding reexamination. Section II.C summarizes the evidentiary standards applicable to reexamination. Section II.D provides a list of all prior art relied upon in this Request. Section II.E provides a list of other supporting documents discussed in this Request. Section II.F provides a summary of pending litigation involving the '520 patent. Section II.G provides an identification of the substantial new questions of patentability raised in this Request. Section II.H provides an overview of the substantial new questions of patentability raised in this Request.

A. Overview of the '520 Patent

The '520 patent broadly claims a method of receiving code, simulating, or “play executing,” the execution of computer code without actually running the code in order to identify the target operation, and then creating an instruction or shortcut allowing the processing component to perform the target operation. This method is the basis of claim 6, the broadest of the claims of the '520 patent. In a preferred embodiment, the '520 patent seeks to improve

conventional systems for initialization of static arrays by reducing the amount of code executed by the virtual machine to statically initialize an array.” *See* ‘520 patent, Abstract; *see also* ‘520 patent, Claim 1. Claims 1, 6, 12, and 18 are independent claims.

Claim 1 recites:

A method in a data processing system for statically initializing an array, comprising the steps of:
compiling source code containing the array with static values to generate a class file with a clinit method containing byte codes to statically initialize the array to the static values;
receiving the class file into a preloader;
simulating execution of the byte codes of the clinit method against a memory without executing the byte codes to identify the static initialization of the array by the preloader;
storing into an output file an instruction requesting the static initialization of the array; and
interpreting the instruction by a virtual machine to perform the static initialization of the array.

Claim 6 recites:

A method in a data processing system, comprising the steps of:
receiving code to be run on a processing component to perform an operation;
play executing the code without running the code on the processing component to identify the operation if the code were run by the processing component; and
creating an instruction for the processing component to perform the operation.

Claim 12 recites:

A data processing system comprising:
a storage device containing:
a program with source code that statically initializes a data structure; and
class files, wherein one of the class files contains a clinit method that statically initializes the data structure;
a memory containing:
a compiler for compiling the program and generating the class files; and
a preloader for consolidating the class files, for play executing the clinit method to determine the static initialization the clinit method performs, and for creating an instruction to perform the static initialization; and
a processor for running the compiler and the preloader.

And Claim 18 recites:

A computer readable medium containing instructions for controlling a data processing system to perform a method, comprising the steps of:

receiving code to be run on a processing component to perform an operation;

simulating execution of the code without running the code on the processing component to identify the operation if the code were run by the processing component; and

creating an instruction for the processing component to perform the operation.

The '520 patent issued from U.S. Patent Application Serial No. 09/055,947. The '520 patent does not claim priority to any previous documents. The '520 patent received one Office Action, rejecting Claims 1 and 3 under 35 U.S.C. § 102(b) as anticipated by Cierniak, "Briki: an optimizing Java compiler," objecting to Claims 2, 4, and 5 as depending from a rejected claim, and allowing Claims 6-23. Interestingly, the Examiner allowed claim 6, the broadest claim of the '520 patent, but rejected claim 1, which is merely a preferred embodiment of the broader claim 6. *See* Non-Final Rejection (July 21, 1999) at 3 (attached as Exhibit 3). The Examiner noted that claim 6 (and the other claims deemed allowable) were distinct from the prior art at least because they disclosed "explicit operations (e.g., initialization, allocation, manipulation and simulation) with respect to 'play' execution." *See id.* at 4. In response, the Applicant filed an Amendment, modifying claim 1 to include the following underlined language: "simulating execution of [play executing] the byte codes of the clinit method against a memory without executing the byte codes to identify the static initialization of the array by the preloader." *See* Amendment (Oct. 19, 1999) at 2 (attached as Exhibit 4). The Examiner, apparently convinced that the prior art, including the Cierniak reference, did not disclose simulated execution of code without actual execution of the code to identify a target output, allowed the application on Jan. 4, 2000. *See* Notice of Allowability. The Examiner declared that:

the cited prior art, either singly or in combination, fails to anticipate or render obvious the simulation of execution with respect to class initialization, without executing byte codes. Cierniak, “Briki: An Optimizing Java Compiler,” teaches of comparing the execution of byte codes, but fails to address the issue of simulating the process without execution.

See id. at 2. Thus, the Examiner’s statements and the claim amendments show that the step of simulating the execution of code without actually executing that code, *i.e.*, “play executing” the code, was the purportedly novel element of the application leading to its allowability.

B. Aspects of the law governing reexamination

1. Citation of prior art

Any person at any time may file a request for reexamination by the Office of any claim of any patent on the basis of any prior art cited under the provisions of section 301.” 35 U.S.C. § 302. Section 301 limits prior art to “patents or printed publications.” 35 U.S.C. § 301.

MPEP 2128 classifies a reference as a printed publication if it is accessible to the public:

A reference is proven to be a ‘printed publication’ ‘upon a satisfactory showing that such *document* has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.’

In re Wyer, 655 F.2d 221, 210 USPQ 790 (C.C.P.A. 1981) (quoting *I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738, 743, 148 USPQ 537, 540 (S.D.N.Y. 1966)).

2. “Old” prior art can raise a significant new question of patentability

The fact that a prior art reference was cited or even previously considered by an examiner does not preclude use of that reference to find a substantial new question of patentability. *See* 35 U.S.C. § 303(a); MPEP Section 2258.01; *see also In re Swanson*, 540 F.3d 1368, 1380-81 (Fed. Cir. 2008) (holding that consideration of a prior art reference in previous litigation and in an original examination does not preclude a finding of a SNQ based on the same prior art reference in reexamination).

A combination of such “old art” and art newly cited during the reexamination proceeding may raise a SNQ. *See* MPEP Section 2258.01. The Patent Office may even find a SNQ based exclusively on previously cited references.

For example, a SNQ may be based solely on old art where the old art is being presented/viewed in a new light, or in a different way, as compared with its use in the earlier concluded examination(s), in view of a material new argument or interpretation presented in the request.

See id.

3. Obviousness standard under *KSR*

The Supreme Court recently relaxed the Federal Circuit’s requirement of a “teaching/suggestion/motivation test,” and instead held that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex Inc. et al.*, 550 U.S. 398, 416 (2007). The Court noted that “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation” of an existing system, then “§103(a) likely bars its patentability.” *Id.* at 417. *KSR* also held that “if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious” if within his or her skill. *See id.*

On October 10, 2007, after the prosecution of the ‘520 patent had come to a close, the U.S. Patent and Trademark Office (“USPTO”) released Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103(a) in View of the Supreme Court Decision in *KSR Int’l Co. v. Teleflex Inc.*, 72 Fed. Reg. 195 at 57526 (the “PTO Guidelines”). The PTO Guidelines adopt the

rationales from the *KSR* decision for determining obviousness. One of the rationales is “‘Obvious to Try’ – Choosing from a Finite Number of Identified, Predictable Solutions, With a Reasonable Expectation of Success.” To reject a claim on this basis, the PTO Guidelines note that pertinent factors to consider are whether “there had been a finite number of identified, predictable potential solutions to the recognized need or problem,” and “one of ordinary skill in the art could have pursued the known potential solutions with a reasonable expectation of success.” *Id.* at 57532. The PTO Guidelines have been incorporated into the MPEP’s examination guidelines for determining obviousness under 35 U.S.C. § 103. *See* MPEP 2141.

Additionally, the Federal Circuit has applied the *KSR* obviousness standard to combine multiple embodiments disclosed in a single prior art reference. *Boston Sci. Scimed, Inc. v. Cordis Corp.*, No. 2008-1073, 2009 U.S. App. LEXIS 588, at *24 (Fed. Cir. Jan. 15, 2009) (holding that a person of ordinary skill would have been motivated to combine one embodiment found in a patent reference with a second, separate embodiment found in the same patent reference).

4. Prior art references need not be enabling in an obviousness inquiry

Moreover, prior art references need not be enabling in the context of an obviousness inquiry. As stated in the MPEP:

35 U.S.C. 103(a) REJECTIONS AND USE OF INOPERATIVE PRIOR ART

“Even if a reference discloses an inoperative device, it is prior art for all that it teaches.” *Beckman Instruments v. LKB Produkter AB*, 892 F.2d 1547, 1551, 13 USPQ2d 1301, 1304 (Fed. Cir. 1989). Therefore, “a non-enabling reference may qualify as prior art for the purpose of determining obviousness under 35 U.S.C. 103.” *Symbol Techs. Inc. v. Opticon Inc.*, 935 F.2d 1569, 1578, 19 USPQ2d 1241, 1247 (Fed. Cir. 1991).

MPEP 2121.01; *see also* MPEP 2145; *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1357 (Fed. Cir. 2003) (holding that under 35 U.S.C. § 103, “a reference need not be enabled; it qualifies as prior art, regardless, for whatever is disclosed therein.”) (citations to other cases omitted).

5. Claims of the patent are to be broadly construed

In a reexamination proceeding, claims are to be given their broadest construction consistent with the specification. *See In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (“During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.”).

C. Evidentiary standards

If the prior references raise a substantial question of patentability of at least one claim of the patent, then a substantial new question of patentability is present. *See* MPEP 2242. A prior art patent or printed publication raises a substantial question of patentability where there is a substantial likelihood that a reasonable examiner would consider the prior art patent or printed publication important in deciding whether or not the claim is patentable. *Id.*

D. Prior art references relied upon in this Request

In accordance with 37 C.F.R. § 1.510, reexamination of claims 1-4 and 6-23 of the ‘520 patent is requested in view of the prior art publications listed below, which raise substantial new questions of patentability. This Request will demonstrate how claims 1-4 and 6-23 of the ‘520 patent are anticipated or rendered obvious in view of the following prior art references:

1. Brian T. Lewis, L. Peter Deutsch, and Theodore C. Goldstein. *Clarity MCode: A Retargetable Intermediate Representation for Compilation*, ACM, IR ’95, 1/95, San Francisco, California, USA (1995) (hereinafter “Lewis”), provided as Exhibit 5.
2. M. Cierniak & W. Li. *Briki: an Optimizing Java Compiler*, IEEE Comcon ’97 Proceedings (Feb. 1997) (hereinafter “Cierniak”), provided as Exhibit 6.

3. Dyer, *Java Decompilers Compared*, JavaWorld.com (July 1, 1997) (hereinafter “Dyer”), provided as Exhibit 7.

E. Supporting documents discussed in this Request

The following documents are provided to assist the Examiner in understanding the Request, including claim charts and references providing background information:

1. Claim Chart based on Lewis, provided as Exhibit 8.
2. Claim Chart based on Cierniak, provided as Exhibit 9.
3. Claim Chart based on Cierniak and Dyer, provided as Exhibit 10.

F. Current Litigation

The Requester is aware of at least one current litigation matter involving the ‘520 patent. On August 12, 2010, Oracle America, Inc. filed a complaint in the U.S. District Court for the Northern District of California alleging that Google, Inc. infringed the ‘520 patent. The case is styled *Oracle America, Inc. v. Google, Inc.*, Civil Action No.: 3:10-cv-03561 WHA. A Joint Case Management Statement for the case, dated November 18, 2010, provides for a claim construction hearing in the case to take place on April 20, 2011. Non-expert discovery will end on July 29, 2011. The deadline for filing dispositive motions is September 8, 2011.

G. Identification of Substantial New Questions of Patentability

In this Request, substantial new questions of patentability for claims 1-4 and 6-23 of the ‘520 patent are identified in accordance with 37 CFR § 1.510(b)(1) as follows:

1. Anticipation under 35 U.S.C. § 102(b) based on the Lewis reference.
 - a. Claims 1-4, 6-13, 15, 16, and 18-23 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Lewis.
2. Anticipation under 35 U.S.C. § 102(b) based on the Cierniak reference.
 - a. Claims 1-4 and 6-23 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Cierniak.

3. Obviousness under 35 U.S.C. § 103(a) based on the Cierniak and Dyer references.

a. Claims 1-4 and 6-23 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Cierniak in view of Dyer.

H. Overview of Substantial New Questions of Patentability

As discussed above, claim 6 of the ‘520 patent broadly claims a method of receiving code, simulating the execution of (or “play executing”) that code without actually running the code in order to identify the target operation, and then creating an instruction or shortcut allowing the processing component to perform the target operation. And claim 1 generally applies this method to the static initialization of arrays, with the specification of the ‘520 patent focusing largely on applying the method of Claim 1 to the <clinit> method to perform static initialization.

As discussed above, during prosecution, the patentability of claims 1 and 6 hinged on the method step of execution of computer code without actually executing that code, or “play executing” the code. But this execution method was publicly known, available, and practiced at the time of the invention of the ‘520 patent. In fact, the Lewis reference is a Sun Microsystems printed publication disclosing the very same “play execution” that Sun Microsystems would later attempt to patent in the ‘520 patent application—over three years later. Further, the Examiner appears to have overlooked very direct language regarding simulated execution of code in the Cierniak reference, as described in more detail below and in the attached claim charts.

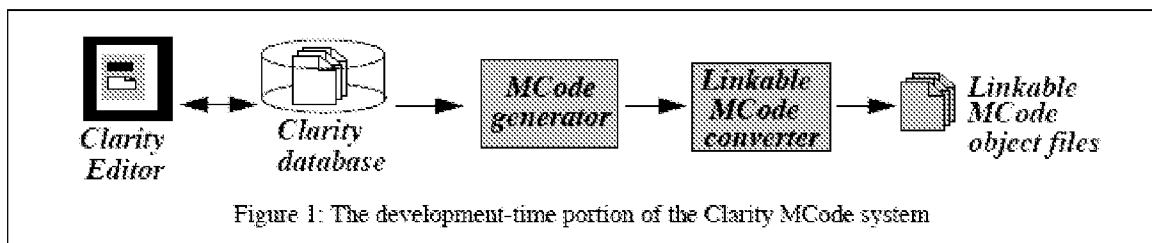
Lewis reference

Lewis discloses a “high-level, machine-independent intermediate representation [called] *MCode* (for “middle code”). See Lewis at 119. Since the Lewis reference was published in January of 1995 it is prior art to the ‘520 patent under 35 U.S.C. § 102(b), given a priority date for the ‘520 patent of April 7, 1998. The Lewis reference was not in front of the Patent Office

during the prosecution of the application that matured into the ‘520 patent nor is it cumulative to the prior art considered by the Patent Office during the prosecution of the ‘520 patent.

Lewis is a publication discussing Sun Microsystems’ development of a dialect of the C++ computer programming language, labeled “*Clarity C++*.” *See* Lewis at 119. The Lewis disclosure is primarily directed to the discussion of a high-level, machine-independent intermediate code representation tool for support in the compilation of the Clarity language. *See id.* Lewis refers to this representation of code as *MCode*. *See id.* The Lewis code generator play executes computer code in order to “maintain a running simulation of the MCode machine’s stack.” *See id.* at 126. Thus, Lewis discloses simulating execution of code to generate MCode instructions, including instructions for statically initializing an array. Accordingly, and as further outlined below and in the attached claim chat, Lewis discloses all of the allegedly novel elements of the ‘520 patent.

As can be seen from Figure 1 of the Lewis reference, reproduced below, the MCode generator receives code that is configured to be run on a processing component to perform an operation. *See* Lewis at 121.



As disclosed in Figure 1, the components of the Lewis system “receive” code to be run on a processing component. For example, the “MCode generator” block in Fig. 1 receives Clarity C++ code. This Clarity C++ code necessarily results in the performance of an operation.

The MCode developed by Lewis seeks to “reduce program memory requirements.” *See* Lewis at 122. MCode reduces the program memory requirements by creating a “pickle,” i.e. “a compact, platform independent encoding of the MCode information into a sequence of bytes. This pickle can later be internalized or unpickled to reconstruct the original MCode. The MCode for each procedure is pickled separately to support procedure-at-a-time processing.” *See* Lewis at 125.

The Lewis reference simulates execution of the code without actually running the code in order to identify the targeted output of a given section of code. “The code generator ‘executes’ MCode instructions in order to maintain a running simulation of the MCode machine’s stack.” *See* Lewis at 126. Once the targeted output of a given section of code is known, a shortcut, referred to as a “CGValue,” is created, which represents the state of the individual entries of the simulated stack. “These entries include constants, variable references, previously ‘executed’ subexpressions, and procedure or method calls.” *See id.* These CGValues operate as a set of shortcut instructions, such that “[g]ood code can be generated” when “the value of the expression is needed.” *See id.*

During the prosecution of the application that matured into the ’520 patent, the Examiner found that the prior art did not disclose “explicit operations (e.g., initialization, allocation, manipulation and simulation) with respect to ‘play’ execution.” *See* Non-Final Rejection at 4. But, as explained above, the Lewis reference discloses the simulation of the execution of code. The Lewis reference also discloses allocation to the simulated stack and initialization based on the receipt of instructions. *See* Lewis at 126 (“The simulated stack records information about operands until the MCode instructions that use them are encountered.”). And manipulation in

the form of “rewriting the procedure’s trampoline instructions” is a core part of the Lewis disclosure. *See id.*

A reasonable examiner would have considered the teachings of the Lewis reference to be important in determining whether or not the claims of the ‘520 patent were patentable. As detailed in the claim chart in Exhibit 8, the Lewis reference either anticipates or, in combination with other prior art references, renders obvious claims 1-4, 6-13, 15, 16, and 18-23 of the ‘520 patent. For this reason, the Lewis reference raises a substantial new question of patentability with respect to claims 1-4, 6-13, 15, 16, and 18-23 of the ‘520 patent.

Cierniak, Dyer

The Cierniak reference discloses a compiler that can perform “optimizations for accessing array elements and object fields” capable of reducing execution time by as much as 50%. *See Cierniak* at 179. Since the Cierniak reference was published in February of 1997, it is prior art to the ‘520 patent under 35 U.S.C. § 102(b), given a priority date for the ‘520 patent of April 7, 1998. The Cierniak reference was in front of the Patent Office during the prosecution of the application that matured into the ‘520 patent, but its content poses a substantial new question of patentability in light of the Examiner’s stated grounds for patentability, because the Examiner seems to have overlooked the disclosure of a simulated execution of computer code within the Cierniak reference.

The Dyer reference compares multiple Java compilers and also serves to point out and disclose the step of play executing computer code. Since the Dyer reference was published on July 1, 1997, it is prior art to the ‘520 patent under 35 U.S.C. § 102(b). The combination of Cierniak and Dyer was not before the Patent Office during the prosecution of the application that

matured into the ‘520 patent, and thus this combination also poses a substantial new question of patentability in that it distinctly points out the step of “play execution” within Java compilers.

During the prosecution of the ‘520 patent, the Examiner allowed claims 6-23, but objected to claims 2, 4, and 5 and rejected claims 1 and 3 as unpatentable under 35 U.S.C. § 102(b) as anticipated by Cierniak.¹ *See* Non-Final Rejection at 2. As discussed above, the prosecution history—including the Applicant’s Amendment to append “simulating execution” of computer code to claim 1 and the Examiner’s stated rationale for allowability—show that the step of “play execution” was the basis for the allowability of the ‘520 patent. But the Examiner appears to have overlooked this exact functionality in Cierniak.

Cierniak discloses the “play execution” of code by explicitly disclosing the process of “symbolically execut[ing]” computer code in a Java virtual machine:

To convert a sequence of bytecodes contained in a basic block to high-level expressions and statements, we symbolically execute each basic block using a temporary stack to emulate a Java virtual machine. For instance the following basic block from the example shown in Section 3.1

```
23 aload_0
24 dup
25 getfield #4 <Field condI.i I>
28 iconst_1
29 iadd
30 putfield #4 <Field condI.i I>
```

is converted to

```
this.i = (this.i + 1);
```

See Cierniak at 182. The Examiner’s declarations that the method step of “play executing” code was not present in the prior art of record is, as above, inconsistent with the Cierniak disclosure. Because the Examiner failed to consider the full scope of the Cierniak reference, Cierniak poses

¹ This rejection pattern is inconsistent with the scope of the claims: claim 6, allowed by the Examiner, is much broader in scope than claim 1, which was rejected by the Examiner.

a substantial new question of patentability.

As discussed above, the Examiner found that “explicit operations (e.g., initialization, allocation, manipulation and simulation) with respect to ‘play’ execution” was a novel aspect of the ‘520 patent application. *See* Non-Final Rejection at 4. But simulation is inherent by virtue of the fact that Cierniak “symbolically execute[s]” the relevant section of code. *See* Cierniak at 182. Further, allocation to and manipulation of the stack is an integral part of the Cierniak disclosure: “Our solution keeps track of the flow of values and when necessary creates temporary variables to hold the values that the Java VM stores on the stack.” *See id.*

In addition to the above disclosure of Cierniak, which directly conflicts with the rationale given by the Examiner in allowing the ‘520 patent, the Dyer reference discloses the simulated execution of byte codes against a memory without executing the byte codes to identify the static initialization of an array. For example, Dyer discloses that the WingDis compiler, “[w]hen decompiling this same static initializer . . . produced equally beautiful and syntactically correct code.” *See* Dyer at 3. With respect to the “explicit operations” discussed by the Examiner, *see* Non-Final Rejection at 4, Dyer discloses sections of code which allow for “static initializer(s)” and the manipulation of code using “inline code inside constructors,” *see* Dyer at 3.

A reasonable examiner would have considered the teachings of Cierniak to be important in determining whether or not the claims of the ‘520 patent were patentable. As detailed in the claim chart in Exhibit 9, Cierniak anticipates claims 1-4 and 6-23 of the ‘520 patent. Further, and as detailed in the claim chart in Exhibit 10, Cierniak in combination with Dyer renders obvious claims 1-4 and 6-23 of the ‘520 patent. For this reason, the Cierniak reference alone and the Cierniak reference in view of Dyer raise a substantial new question of patentability with respect to claims 1-4 and 6-23 of the ‘520 patent.

III. DETAILED EXPLANATION UNDER 37 C.F.R. § 1.510(B)(2) OF THE PERTINENCY AND MANNER OF APPLYING THE CITED PRIOR ART TO EVERY CLAIM FOR WHICH REEXAMINATION IS REQUESTED

The detailed explanation herein under 37 C.F.R. § 1.510(b)(2) comprises a summary of the reasons for unpatentability of the claims (set forth below) supported by detailed Claim Charts. This detailed explanation describes the pertinence and manner of applying the prior art references to the claims of the '520 patent.

A. Rejections of Claims

1. **Claims 1-4, 6-13, 15, 16, and 18-23 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by the Lewis reference.**

The Lewis reference was published in January of 1995. The printed publication is prior art to the '520 patent under 35 U.S.C. § 102(b). The Lewis reference was not in front of the Patent Office during the prosecution of the application that matured into the '520 patent nor is it cumulative to the prior art considered by the Patent Office during the prosecution of the '520 patent. As set forth in detail in the Claim Chart attached as Exhibit 8, the Lewis reference discloses each of the elements of claims 1-4, 6-13, 15, 16, and 18-23.

2. **Claims 1-4 and 6-23 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by Cierniak.**

The Cierniak reference was published in February of 1997. It is prior art to the '520 patent under 35 U.S.C. § 102(b). The Cierniak reference was in front of the Patent Office during the prosecution of the application that matured into the '520 patent, but its content poses a substantial new question of patentability in light of the Examiner's stated grounds for patentability. As set forth in detail in the Claim Chart attached as Exhibit 9, the Cierniak reference, either alone or in combination with the other cited references, discloses or renders obvious each of the elements of claims 1-4 and 6-23 of the '520 patent.

3. Claims 1-4 and 6-23 are unpatentable under 35 U.S.C. § 103(a) as rendered obvious by Cierniak in view of Dyer.

The Cierniak reference was published in February of 1997. It is prior art to the '520 patent under 35 U.S.C. § 102(b). The Dyer reference was published on July 1, 1999. It is prior art to the '520 patent under 35 U.S.C. § 102(b). The Cierniak reference was in front of the Patent Office during the prosecution of the application that matured into the '520 patent, but its content poses a substantial new question of patentability in light of the Examiner's stated grounds for patentability, and in light of the Dyer disclosure. As set forth in detail in the Claim Chart attached as Exhibit 10, the Cierniak reference, either alone or in combination with the Dyer reference, discloses or renders obvious each of the elements of claims 1-4 and 6-23 of the '520 patent.

IV. CONCLUSION

For the reasons provided herein, Requester respectfully submits that the prior art submitted herewith raises substantial new questions of patentability as to claims 1-4 and 6-23 of the '520 patent because, as discussed above, claims 1-4 and 6-23 of the '520 patent are either anticipated or rendered obvious in view of the prior art publications discussed herein. Accordingly, reexamination of claims 1-4 and 6-23 of the '520 patent is respectfully requested, finally rejecting these claims.

The undersigned further notes the standards set forth at 37 C.F.R. 1.550(f) wherein the reexamination Requester will be sent copies of Office actions issued during the reexamination proceedings as well as served (by the patent owner) with any document filed in the reexamination proceeding in accordance with 37 C.F.R. 1.248. (*See* MPEP §§ 2264 and 2266.)

If the Patent Office determines that a fee and/or other relief is required, Requester petitions for any required relief including authorizing the Commissioner to charge the cost of

such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 11-0980** referencing Docket No. 13557.112021.

As identified in the attached Certificate of Service and in accordance with 37 C.F.R. §§ 1.33(c) and 1.510(b)(5), a copy of the present request is being served to the address of the attorney or agent of record.

February 15, 2011

Respectfully submitted,
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