

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** WILLIAM PRESTEN ALEXANDER III  
and  
WEIMING GU

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Appeal No. 2003-0954  
Application No. 09/306,190

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ON BRIEF

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Before JERRY SMITH, RUGGIERO and MACDONALD, **Administrative Patent Judges**.  
MACDONALD, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the final rejection of claims 1-3, 7-14, and 18-24. The Examiner has indicated claims 4-6 and 15-17 as allowable. (Final rejection, paper number 5, page 7)

**Invention**

Appellant's invention relates to a process and system for dynamically compiling a program. (Appellants' specification, page 1, lines 15-17) Particularly, if during execution it is

determined that the interpretation of a method meets certain criteria that indicate a hot spot, then the interpretation is halted. A new method is then constructed, compiled, and invoked in such a manner that the newly constructed method recreates the execution state of the halted method. (specification, page 5) The compiled method executes at a faster speed than the interpreted method. (specification, page 38, lines 25-27)

Claim 1 is representative of the claimed invention and is reproduced as follows:

1. A process for executing a method, the process comprising the computer-implemented steps of:

during execution of an interpreted method, determining to compile the interpreted method;

constructing a second method;

compiling the second method; and

invoking the second method so that an execution state of the interpreted method is recreated.

### **References**

The reference relied on by the Examiner is as follows:

White Paper, "The Java Hotspot™ Performance Engine Architecture", Sun Microsystems, Inc., April 1999. (Hereinafter referred to as the White Paper)

### **Rejections At Issue**

Claims 1-3, 7-9, 11-14, 18-20, and 22-24 stand rejected under 35 U.S.C. § 102 as being anticipated by the White Paper.

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Claims 10 and 21 stand rejected under 35 U.S.C. § 103 as being obvious over the White Paper.

Throughout our opinion, we make references to the Appellants' briefs, and to the Examiner's Answer for the respective details thereof.<sup>1</sup>

### OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellants and the Examiner, for the reasons stated **infra**, we reverse the Examiner's rejection of claims 1-3, 7-9, 11-14, 18-20, and 22-24 under 35 U.S.C. §102 and claims 10 and 21 under 35 U.S.C. §103.

#### I. **Whether the Rejection of Claims 1-3, 7-9, 11-14, 18-20, and 22-24 Under 35 U.S.C. §102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of the White Paper does not fully meet the invention as recited in claims 1-3, 7-9, 11-14, 18-20, and 22-24. Accordingly, we reverse.

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. **See In re King**, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and **Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.**, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

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<sup>1</sup> Appellants filed an appeal brief on March 1, 2002. Appellants filed a reply brief on July 22, 2002. The Examiner mailed out an office communication on May 20, 2002.

With respect to independent claim 1, Appellants' argue, "the White Paper does not provide any teaching of determining, during execution of an interpreted method, to compile the interpreted method." (brief, page 15, lines 27-29) The Examiner responds, "claim 1 [...] does not claim whether it runs completely the first method or not." (answer, page 14, lines 3-4) Appellants reply, "claims 1 and 2 clearly state that the determination to compile is made during execution" and "do state that the method is not run completely." (reply brief, page 8, lines 33-35) We find Appellants' argument persuasive.

Our reviewing court states in **In re Zletz**, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) that "claims must be interpreted as broadly as their terms reasonably allow." Our reviewing court further states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." **Texas Digital Sys. Inc v. Telegenix Inc.**, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002), **cert. denied**, 538 U.S. 1058 (2003).

Upon our review of Appellants' specification, we fail to find any definition of the term "during" that is different from the ordinary meaning. We find the ordinary meaning of the term "during" is best found in the dictionary. We note that the definition most suitable for "during" is "at some time in".<sup>2</sup> We find that the claim language precludes reading on a determination that occurs "after" the execution of the interpreted method such as in the prior art system of Appellants' background and in the Java Hotspot system of the White Paper. As pointed out by

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<sup>2</sup> Webster's II New Riverside University Dictionary, 1988, page 411. Copy provided to Appellants.

Appellants, “[t]here is no ability in the mechanism described in the White Paper to determine to compile an interpreted method during execution of the interpreted method.” (reply brief, page 7, lines 21-23) Therefore, we will not sustain the Examiner’s rejection under 35 U.S.C. § 102.

With respect to independent claims 2, 3, 12, 13, 14, 23, and 24, these claims share the “during execution” limitation of claim 1 discussed above and we will not sustain the Examiner’s rejection under 35 U.S.C. § 102 for the reason discussed above with respect to claim 1.

**II. Whether the Rejection of Claims 10 and 21 Under 35 U.S.C. §103 is proper?**

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 10 and 21. Accordingly, we reverse.

With respect to independent claims 10 and 21, these claims share the “during execution” limitation of claim 1 discussed above and we will not sustain the Examiner’s single reference rejection under 35 U.S.C. § 103 for the reason discussed above with respect to claim 1.

**Other Issues**

We note that at the time of filing there was a misspelling in the name of one of the applicants. That misspelling is still present in the official record. His signature in the file shows appellant Alexander, III’s middle name is “Preston” not “Presten”. Also, other records at the USPTO show the spelling to be “Preston.” Appellants are invited to make the appropriate correction to the inventorship.

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**Conclusion**

In view of the foregoing discussion, we have not sustained the rejection under 35 U.S.C. §102 of claims 1-3, 7-9, 11-14, 18-20, and 22-24, and we have not sustained the rejection under 35 U.S.C. §103 of claims 10 and 21.

**REVERSED**

JERRY SMITH  
Administrative Patent Judge

JOSEPH F. RUGGIERO  
Administrative Patent Judge

ALLEN R. MACDONALD  
Administrative Patent Judge

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