

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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOSEPH E. PROVINO
and MARK M. TOWFIGH

Appeal No. 2000-2283
Application No. 08/497,287

ON BRIEF

Before RUGGIERO, KRASS, and DIXON, Administrative Patent Judges.
RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-30, which are all of the claims pending in the present application.

The claimed invention relates to a method and system for providing a virtual machine for a plurality of application programs including a calling program and a called program which is called by the calling program. Further included is a global state store for

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storing selected global state information for controlling selected operations. In operation, the calling program conditions the global state information to a calling program global state, performs predetermined calling program processing, and calls the called program. In response, the called program saves the calling program global information in the called program's virtual machine, and further conditions the global state information to a called program global state. After performing predetermined called program processing operations, the called program restores the saved calling program global state to the global state information store and returns control to the calling program. According to Appellants (specification, page 3), this restoration ensures that, when the calling program is again processed, the global state information will be proper for the calling program.

Claim 1 is illustrative of the invention and reads as follows:

1. A computer system including:
 - A. a global machine for providing a respective virtual machine for each of a calling program and a called program, the global machine further providing a global state store for storing selected global state information for controlling selected operations;
 - B. the calling program conditioning the global state information stored in the global state store to a calling program global state, performing predetermined calling program processing operations and calling the called program; and

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C. the called program saving the calling program global information contained in the global state store in the called program's virtual machine after being called by the calling program, the called program further conditioning the global state information in the global state store to a called program global state and performing predetermined called program processing operations, and thereafter restoring the saved calling program global state to the global state information store and returning control to the calling program.

The Examiner relies on the following prior art:

Fukuoka	5,349,680	Sep. 20, 1994
Sandage et al. (Sandage)	5,414,848	May 09, 1995
Osisek	5,555,385	Sep. 10, 1996
		(filed Oct. 27, 1993)

Claims 1-30 stand finally rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers Sandage in view of Osisek with respect to claims 1, 7, 13, 19, and 25, and adds Fukuoka to the basic combination with respect to claims 2-6, 8-12, 14-18, 20-24, and 26-30.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs¹ and Answer for the respective details.

¹ The Appeal Brief was filed October 7, 1999 (Paper No. 17). In response to the Examiner's Answer dated January 19, 2000 (Paper No. 19), a Reply Brief was filed March 21, 2000 (Paper No. 20), which was acknowledged and entered by the Examiner as indicated in the communication dated July 3, 2000 (Paper No. 21).

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OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

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 1-30. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must

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stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to each of the appealed independent claims 1, 7, 13, 19, and 25, the Examiner, as the basis for the obviousness rejection, proposes to modify the virtual machine disclosure of Sandage by relying on Osisek to supply the missing teachings of a global machine and a global state store. According to the Examiner, the skilled artisan would have been motivated and found it obvious to modify Sandage with Osisek "... because it incorporates the ability to control an [sic, a] virtual machine environment comprising of [sic] a plurality of virtual machines." (Answer, page 4).

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Appellants' arguments in response to the Examiner's obviousness rejection assert a failure by the Examiner to establish a prima facie case of obviousness since all of the claim limitations are not taught or suggested by the applied prior art. After careful review of the applied Sandage and Osisek references, in light of the arguments of record, we are in general agreement with Appellants' arguments as set forth in the Briefs.

Initially, we find ourselves in agreement with Appellants' assertion (Brief, pages 8 and 9; Reply Brief, pages 4 and 5) that, unlike the present invention, the calling program in Sandage does not store information in any location, let alone global state information in a global state store as claimed. We also agree with Appellants that the Examiner has not shown how the called program in Sandage saves information in any store, let alone a global state store, and eventually restores the saved information to the store from which it was obtained, all features which appear in each of the appealed independent claims. Our interpretation of the disclosure of Sandage coincides with that of Appellants, i.e., while Sandage discloses the passing of information between calling and called programs, there is no disclosure of the claimed features which detail the operation of the called program when it is called and when it returns control to the calling program.

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We also agree with Appellants (Brief, page 9; Reply Brief, page 7) that Osisek, applied by the Examiner to provide a general teaching of the existence of a global machine and a global state store, does not cure the deficiencies of Sandage discussed supra. Given these deficiencies in the disclosures of the applied prior art, we can find no teaching or suggestion, and the Examiner has pointed to none, as to how and in what manner the Sandage and Osisek references might be combined to arrive at the claimed invention. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F. 2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

It is also our view, that, even assuming, arguendo, that proper motivation were established for modifying Sandage with Osisek, there is no indication as to how such modification would address the particulars of the claim language of independent claims 1, 7, 13, 19, and 25, each of which requires a particular relationship between a called program and a calling program, and the particular conditions under which information is transferred by each of the calling and called programs to and from a global state store. In order for us to sustain the Examiner's rejection under

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35 U.S.C. § 103, we would need to resort to speculation or unfounded assumptions or rationales to supply deficiencies in the factual basis of the rejection before us. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968), rehearing denied, 390 U.S. 1000 (1968). Given the factual situation presented to us, it is our view that any suggestion to make the combination suggested by the Examiner could only come from Appellants' own disclosure and not from any teachings or suggestions in the references themselves.

We have also reviewed the Fukuoka reference, applied by the Examiner to address the memory stack and time slot features of several of the dependent claims. We find nothing, however, in the disclosure of Fukuoka which would overcome the previously discussed deficiencies of Sandage and Osisek.

Accordingly, since we are of the opinion that the prior art applied by the Examiner does not support the obviousness rejection, we do not sustain the rejection of independent claims 1, 7, 13, 19, and 25, nor of claims 2-6, 8-12, 14-18, 20-24, and 26-30 dependent thereon. Therefore, the decision of the Examiner rejecting claims 1-30 under 35 U.S.C. § 103(a) is reversed.

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REVERSED

JOSEPH F. RUGGIERO)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JOSEPH L. DIXON)	
Administrative Patent Judge)	

JFR/lp

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RICHARD A. JORDAN
P.O BOX 81363
WELLESLEY MA 02181-0004