

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

MAR 28 1996

Ex parte HAJIME AKAI, HITOSHI YASUI,
MASAYUKI NAKAGAWA, SHUNSUKE HAYASHI
and SADATOSHI SOGO

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Appeal No. 95-4506
Application 07/502,202¹

HEARD: March 7, 1996

Before HARKCOM, Vice Chief Administrative Patent Judge, and
THOMAS and LEE, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1, 2 and 10 to 12. Appellants have cancelled claim 3 and claims 4 to 9 have been made subject to a

¹ Application for patent filed March 30, 1990.

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restriction requirement and are therefore withdrawn from further consideration.

Representative claim 1 is reproduced below:

1. A duplex computer system having two computer systems, one of which is in a control status and the other of which is in a standby status, and a communication line of baton pass type capable of communication functions, in which the communication functions are accomplished when a baton frame representing a communication right is circulated to one of the computer systems, each one computer system comprising:

baton detection unit means for detecting a baton frame addressed to the computer system;

baton reception counter means for storing a value and for updating the value when said baton detection unit means detects the baton frame;

decision unit means for reading out the value stored in said baton reception counter means for instructing the computer system which has been in standby status to assume the control status if the value stored in said reception counter means is not updated after a predetermined time period has elapsed;

ready signal generation means made responsive to an instruction signal from said detection unit means for outputting a ready signal (CPURDY) in an active or an inactive state on the basis of the instruction signal and the result of a self-diagnosis; and

duplex control unit means made responsive to said ready signal (CPURDY) for controlling whether the one computer system assumes the control status or the standby status.

The references relied upon by the examiner are:

Hansen	4,276,593	June 30, 1981
Kryskow, Jr. et al. (Kryskow)	4,491,946	Jan. 1, 1985

Claims 10 to 12 stand rejected under 35 U.S.C. § 112, first paragraph as being based upon a specification which does not

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provide support for the invention as is now claimed, does not provide an adequate written description of the invention and are rejected based upon a line of reasoning where the appellants have failed to present a best mode of carrying out the invention.

Additionally, claims 1 and 2 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Kryskow in view of Hansen.

Rather than repeat the positions of the appellants and the examiner, reference is made to the briefs and the answers for the respective details thereof.

OPINION

We turn first to the rejection of claims 10 to 12 under 35 U.S.C. § 112, first paragraph. Initially, we note that the examiner's reasoning for lack of "support" for the claimed invention of claims 10 to 12 implicitly refers to the written description requirement of 35 U.S.C. § 112, first paragraph. In re Higbee, 527 F.2d 1405, 188 USPQ 488 (CCPA 1976). Therefore, the examiner's separate recitation of lack of support is redundant with respect to the second reasoning, that of the lack of a written description.

The test to be applied under the written description portion of 35 U.S.C. § 112, first paragraph, is whether the disclosure of

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the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of later claimed subject matter. Vas Cath Inc. v. Mahurkar, 935 F.2d 1555, 19 USPQ2d 1111, reh'g. denied, (Fed. Cir. July 8, 1991) and reh'g. en banc denied, (Fed. Cir. July 29, 1991). It is noted that claims 10 to 12 were added by amendment on April 1, 1993 and were not originally filed claims. Claim 1, as presently amended, incorporated the limitations of claim 3 as originally filed and cancelled with the amended version of claim 1 in this noted amendment. Claim 2 remains the same as reflected as original claim 2 as filed. Since there is no originally filed claim versions of present claims 10 to 12, we must look to other portions of the specification as filed to reach the proper determination of the issue.

The manner in which the specification as filed meets the written description requirement is not material. The requirement may be met by either an express or an implicit disclosure. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). An invention claimed need not be described in ipsis verbis in order to satisfy the written description requirement of 35 U.S.C. § 112, first paragraph. In re Lukach, 442 F.2d 967, 169 USPQ 795 (CCPA 1971). The question is not whether an added word was the word used in

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the specification as filed, but whether there is support in the specification for the employment of the word in the claims, that is, whether the concept is present in the original disclosure. See In re Anderson, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973).

At the top of page 6 of the principal brief on appeal, appellants admit that there is no explicit statements in the specification that the features of one preferred embodiment of the invention may be used in another preferred embodiment. However, appellants go on to say that there is evidence from reading the specification and the drawings that this is implicitly so. This reasoning has been extended to the reply brief and appears to be consistent with the case law noted earlier. With this general proposition, we generally agree and therefore reverse the rejection for the reasons generally set forth by appellants in the brief and reply brief.

The examiner's reasoning includes the assertion that the features in claims 10 to 12 are to be found in embodiments three and four (Figures 6 and 7) of appellants' specification and not in any embodiment teaching the baton passing of claim 1. The examiner also asserts that appellants have taught embodiments one, three and four as separate entities and not devices to be combined. In the supplemental answer the examiner asserts that there is no mention of baton passing in the description of the third embodiment and the description of the fourth embodiment.

By such reasoning, we interpret the examiner's position as there being no explicit mention of baton passing for embodiments three and four with respect to Figures 6 and 7. In the context of criticizing appellants' Summary of the Invention in the brief, at page 2 of the original answer, the examiner makes specific reference to the embodiments of Figures 3 and 4 relating to the decision unit 16, the baton detector 24, the baton reception counter 25, the read means 26 and the ready signal generator 14 as not being specifically taught in embodiments three and four in respect to Figure 6 and 7. Again, we interpret the examiner's reasoning here that there is no explicit disclosure or teachings of these features in embodiments three and four with respect to Figures 6 and 7.

Although we agree with the examiner that there is no explicit disclosure of the noted features, this does not answer the question of possession reasonably determinable by the artisan from the originally filed disclosure of the presently claimed invention recited in claims 10 to 12. There is a discussion of the third embodiment in Figure 6 at corresponding page 11, line 16 to page 16, line 17 of the specification as filed (dependent claims 10 and 11 on appeal) and a corresponding discussion of the fourth embodiment in Figure 7 at page 16, line 19 to page 19,

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line 2 of the specification as filed (reflecting the subject matter of claim 12 on appeal). We understand that the artisan, upon reading and studying the original disclosure and drawings, would have come to the same conclusion that the communication unit 2 with respect to Figures 6 and 7 relates directly to the communication interface unit 2 as generally set forth in and initially shown in Figure 3, corresponding to the first embodiment. In each of the respective embodiments in Figures 6 and 7, the operation of the respective interface unit 2 is such as to communicate over the bus L1, which communication protocols are discussed initially with respect to the Figure 2 embodiment and at page 5 of the specification and the initial discussion of the operation of bus L1 utilizing the baton passing method of Figure 3 in the context of the operation of communication bus L1 at page 6, beginning at line 9 of the specification as filed. In discussing the operation and nature of the communication of signals over L1 with respect to Figure 6 and 7 in the written description portion, it is clear to the artisan that there is an implicit reliance upon the earlier discussed versions of the actual means to achieve this as set forth initially in the embodiment of Figure 3.

The significance of all this is that independent claim 1 is essentially a reflection of the subject matter of Figure 3 on

appeal, that is, the first embodiment as well as being generic to the more specific recitation of the details of Figure 6 (3rd embodiment) in respect to dependent claims 10 and 11 and of the details of Figure 7 (4th embodiment) with respect to the recitation in dependent claim 12.

It is noted that the CPURDY signal in the Figure 3 embodiment (number 1) remains internal to the operation of the respective computer units FC1, FC2. In the Figure 6 embodiment (number 3) analogous signals, labeled CPURDY0 and CPURDY1, are cross communicated in the overall system between computer systems FC1 and FC2. This same cross communication occurs in the Figure 7 embodiment (number 4) and page 17, lines 11 and 12 indicate that the control unit 15 has a similar structure in Figure 7 as that shown in Figure 6. All of this is easy to identify by a simple comparison of respective Figures 3, 6 and 7. Based upon our study of Figures 6 and 7, there is no inconsistency with respect to the operation of CPU10 and its ready signal generator 14 implicit to it with respect to these features and the operation of the duplex control unit 15 (including logic control 150 in Figures 6 and 7) and the operation of the respective elements generally set forth in Figure 3. The corresponding functional language of claim 1 as to these related features is not inconsistent therewith and appears to be generic to the operation of the

more specific versions recited in claims 10, 11 and 12, respectively corresponding to Figures 6 and 7. Therefore, as asserted by appellants in the brief and reply brief, the features that appear in the later embodiments 3 and 4 in Figures 6 and 7 clearly amplify and expand upon the features disclosed in the previous embodiments. Even though the specification utilizes language of separate "embodiments" among some of the Figures, we do not agree with the examiner's assertions that the embodiments in respect to Figures 3, 6 and 7 are disclosed as separate and distinct entities that have no relationship among each other.

To the extent the examiner's rejection of claims 10 to 12 under 35 U.S.C. § 112, first paragraph, is based upon the best mode requirement of this statute, the rejection must be reversed because that which the examiner contends is not disclosed has been shown to be disclosed. In any event, the examiner identified no evidence tending to show that what the examiner thought was not disclosed was considered as the best mode by the appellants. Additionally, our review of the entire specification, claims and drawings as filed in the context of claims 10 to 12 on appeal leads us to conclude that the quality of appellants' best mode disclosure is not so poor as to effectively result in concealment. In re Sherwood, 613 F.2d 809, 204 USPQ 537 (CCPA 1980). We find no evidence indicating that appellants applied for a patent while at the same time concealing from the public a

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preferred embodiment or the best mode contemplated by them of carrying out the invention. In re Gay, 309 F.2d 769, 135 USPQ 311 (CCPA 1962).

In summary, we have reversed the rejection of claims 10 to 12 under 35 U.S.C. § 112, first paragraph.

Before discussing the merits of the rejection of claims 1 and 2 under 35 U.S.C. § 103, we note in passing that during the amendment process of incorporating the subject matter of claim 3 into claim 1 and thereby cancelling claim 3, the language in original claim 3 relating to the decision unit was changed to detection unit. It is clear, however, in reading the ready signal generation means clause of present claim 1 on appeal that the claim detection unit clearly refers to the previously recited decision unit means and that the instruction signals recited in the ready signal generation means clause clearly relate to a non-recited instruction signal in the decision unit means clause, a signal which is clearly implied. From an artisan's perspective, these ambiguities would not have presented any fatal impediment to a proper consideration of applied art against claim 1 on appeal.

As to the merits of rejecting claims 1 and 2 under 35 U.S.C. § 103 in light of the collective teachings of Kryskow in view of

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Hansen, we will sustain this rejection essentially for the reasons set forth by the examiner in the principal answer as amplified herein.

Both the examiner and the appellants recognize that Kryskow does not teach a data processing system with duplex computers. We do note that column 8, lines 12 to 27 of Kryskow teaches that the token passing data structure protocols, which form the essence of the details in Kryskow, are said to apply to terminal devices, computers and processors for intercommunication purposes on the common bus oriented architecture generally set in Figure 2 of Kryskow. The discussion of this feature does not detail the particulars of the access and data communication modules 24 and 25, respectively. With respect to these elements, column 27, lines 28 to 38 indicate that each of them are respectively single microprocessors which intercommunicate among each other according to the handshake protocol otherwise set forth in this reference. Therefore, it is clear that Kryskow's teachings indicate the applicability of his teachings to a comparable type of common bus structure 18 from a host computer 16 as generally set forth at the bottom of the Figure in Hansen.

It is this technical linkage within the teachings of the respective references, which leads us to disagree with appellants' major assertions in the reply brief that the two

references relied upon in the rejection of the claims under 35 U.S.C. § 103 are nonanalogous. The above-noted technical interrelationship clearly would have indicated to the artisan clearly relevant analogous prior art within the guidance provided by In re GPAC Inc., 57 F.3d 1573, 35 USPQ2d 1116 (Fed. Cir. 1995), reh'g, en banc denied, (Fed. Cir. Oct. 24, 1995), relying in part on In re Wood, 599 F.2d 1032, 202 USPQ 171 (CCPA 1979). Thus, there would have been an obvious logical commendation among the teachings of the two references which would have been pertinent to an inventor's attention in considering the problems or deficiencies in Kryskow as set forth in In re Clay, 966 F.2d 656, 23 USPQ2d 1058 (Fed. Cir. 1992), which is mentioned by appellants in the reply brief.

That portion of Kryskow particularly relied upon by the examiner in the answer is at column 9, lines 63 through column 10, line 68. Within these teachings, appellants point out that Kryskow permits other computer systems or stations 22 and not any particular station 22 by itself in a self diagnostic sense, to diagnose a fault or problem and transfer the control status from a given station 22 to another station 22 according to the token protocols in Kryskow. This reference essentially is silent as to the nature of any fault diagnosis which may have gone on internally to any one station 22. In contrast, the examiner's reliance upon Hansen is clearly appropriate and, according to the

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examiner's reasoning, the artisan clearly would have found it desirable to have added to or enhanced the already existing teachings of diagnosis between terminal stations 22 in Kryskow by permitting a self diagnostic capability internally within an individual station 22 of Kryskow when any one of these stations 22 would have been embodied in a dual or duplex computer arrangement 10 as represented by Hansen. As argued by the examiner, then, there would have been a clear enhancement of the self diagnostic and reconfiguring capabilities of Kryskow's protocols to permit even more enhanced reliability of the whole communication network (local area network 21) in Figure 2 of Kryskow than this reference particularly teaches. Thus, not only would the obviousness have been apparent to the artisan of utilizing the teachings of Hansen in the overall system in Kryskow as argued by the examiner, but the analogousness of Hansen's teaching according to In re Clay, In re Wood, and In re GPAC, would have been established as well.

The collective teachings of the two references relied upon by the examiner would have suggested their combination to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Contrary to the assertion of improper hindsight analysis by the examiner in the brief and reply brief, all the examiner has done is apply knowledge clearly present in

the prior art as just noted. In re Sheckler, 438 F.2d 999, 168 USPQ 716 (CCPA 1971).

Page 10 of appellants' principal brief on appeal recognizes that Hansen teaches a type of self-diagnosis, but continues to urge that this reference does not teach a capability for the computer system diagnosing itself to transfer control status to another computer system. Stated differently, appellants' position also encompasses the argument that it is the non-selected controller which monitors the selected controller thus causing the non-selected controller to switch the control status rather than the self diagnosed or selected controller as essentially required by representative claim 1 on appeal. With these positions, we respectfully disagree.

Page 8 of the examiner's answer recognizes that the appellants' system basically has the active processor send a signal to a switch which causes the inactive processor to assume control. Then the examiner says that "Hansen sends a signal (i.e. the absence of a signal) to the inactive processor with sends a signal to a switch which causes the inactive processor to assume control (column 5, lines 27 to 44)." The examiner's position is correct that the selected processor clearly sends a signal to the non-selected processor by the absence of the presence of an electrical signal according to the logic utilized by Hansen. As noted by appellants at page 10 of the principal brief on appeal,

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when representative control unit 12 is in a selected control status it detects a fault in itself causing it to cease to send the so-called "all is well" signal from serial input output unit 32A to the serial input output unit 32B in processor 14. To us and to the artisan, this is logically the same concept as is set forth in the claims on appeal and appellants' disclosed invention. In re Bascom, 230 F.2d 612, 109 USPQ 98 (CCPA 1956).

Essentially, we see the digital logic of the claims being the same as but logically the inverse of that which is set forth in Hansen. The abstract of Hansen indicates that transfer will occur from the selected controller to the non-selected controller "through failure of the selected controller to produce transfer preventing signals" (emphasis added). Within the context of the self diagnostic capabilities discussed at columns 4 and 5 of Hansen, the "all is well" signal is continually generated by the selected controller 12 and conducted to the non-selected controller 14 in the manner described earlier as long as no error is determined in a manner analogous to the recitation of the CPURDY signal recited in the ready signal generation means clause and the duplex control unit clause of claim 1 on appeal. When an error is detected, the signal is not transferred. In the context of claim 1 and in the context of the disclosed invention when an

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internal error is detected, this CPU ready signal is not propagated in its logically active status but is propagated in a logical inactive status. This is clearly analogous to the artisan to the presence or absence of the "all is well" signal in Hansen.

The function of the duplex control unit in claim 1 on appeal is analogous to the disclosed operation of unit 15 in Figure 3 and the flip flop representative thereof in Figure 4 as disclosed. In Hansen, the operation of gates 46A and 46B is taught to be logically equivalent to the operation of a flip flop. Finally, we see no patentable distinction of any limitation recited in represented claim 1 on appeal as to whether Hansen operates in accordance with both hardware and software capabilities of his arrangement in his Figure in contrast to appellants' argued disclosed approach of hardware only operation.

Inasmuch as there are no arguments presented in the brief and reply brief as to the particulars of the elements recited in claim 2 on appeal within the rejection of claims 1 and 2 under 35 U.S.C. § 103, this claim 2 falls with its parent independent claim 1 on appeal. In re Nielson, 816 F.2d 1567, 2 USPQ2d 1525 (Fed. Cir. 1987); In re Kaslow, 707 F.2d 1366, 217 USPQ 1089

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(Fed. Cir. 1983) and In re Wiseman, 596 F.2d 1019, 201 USPQ 658 (CCPA 1979).

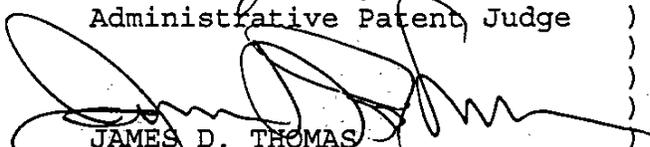
Thus, we sustain the rejection of claims 1 and 2 under 35 U.S.C. § 103.

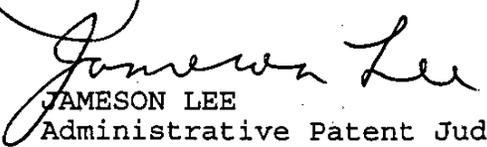
To summarize, we have reversed the rejection of claims 10 to 12 under 35 U.S.C. § 112, first paragraph, but have sustained the rejection of claims 1 and 2 under 35 U.S.C. § 103. Accordingly, the decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART


GARY V. HARKCOM, Vice Chief
Administrative Patent Judge)


JAMES D. THOMAS
Administrative Patent Judge)


JAMESON LEE
Administrative Patent Judge)

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Pennie & Edmonds
1155 Avenue of the Americas
New York, NY 10036