The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANDREW MACCORMACK

Appeal No. 2003-0031
Application No. 09/240,176

ON BRIEF

Before RUGGIERO, GROSS, and BARRY, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-15, which are all of the claims pending in the present application.

The disclosed invention relates to a method and system for controlling access to a memory in devices such as the receiver of a digital set-top box for television systems. An incoming multiplexed data stream is demultiplexed, sorted according to processing requirements, and stored in a plurality of circular buffers based on the sort. Each output channel of the system

requires access to only a single circular buffer and control of the access to the memory is achieved using a single set of pointers for each circular buffer.

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

> 1. A memory controller having a plurality of channels, the memory controller comprising:
>
> input circuitry for receiving data to be stored in the memory;
>
> storage means for storing the base and top addresses of a plurality of circular buffers in the memory to which the received data is to be stored, and for storing a write pointer for each buffer;
>
> addressing circuitry for generating the address of one of the plurality of circular buffers to which the received data is to be written in dependence on a stored base and top address and write pointer; and
>
> output circuitry for writing the data into one of the plurality of circular buffers at the generated address, wherein at least one of the channels of the memory controller is arranged to control the storage of data in one of the plurality of circular buffers, and at least one of the channels is arranged to retrieve data from only a respective buffer.

The Examiner relies on the following prior art:

Osborne	6,032,179	Feb. 29, 2000 (filed Aug. 14, 1996)

Claims 1-15, all of the appealed claims, stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Osborne.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs[1] and Answer for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection 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, Appellant's 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

[1] The Appeal Brief was filed June 19, 2002 (Paper No. 14). In response to the Examiner's Answer dated July 3, 2002 (Paper No. 15), a Reply Brief was filed October 21, 2002 (Paper No. 17), which was acknowledged and entered by the Examiner as indicated in the communication dated February 5, 2003 (Paper No. 19).

particular art would not have suggested to one of ordinary skill in the art the invention set forth in claims 1-15. 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, 1073-74, 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, 17-18, 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 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 independent claims 1, 5, and 8, Appellant's arguments in response to the obviousness rejection assert a failure by the Examiner to establish a prima facie case of obviousness since all of the claimed limitations are not taught or suggested by the applied prior art reference. After reviewing the applied Osborne reference in light of the arguments of record, we are in general agreement with Appellant's position as stated in the Briefs.

Our interpretation of the disclosure of Osborne coincides with that of Appellant (Brief, pages 4-6; Reply Brief, pages 2-6), i.e., we find no disclosure or suggestion of configuring the memory controller so that "at least one of the channels is arranged to retrieve data from only a respective buffer," a feature present in each of the independent claims 1, 5, and 8. In our view, the Examiner has unreasonably interpreted the language of claims 1, 5, and 8 as merely requiring dedicated receive/transmit channels. (Answer, page 4). We can find no

basis on the record before us for the Examiner interpreting the claim language in this manner. In our view, the Examiner's interpretation could only be reached by pointedly ignoring the precise language of the claims on appeal. Our reviewing courts have held that, in assessing patentability of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 983-84, 180 USPQ 580, 582 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

We recognize that the Examiner, at pages 6-8 in the "***Response to Argument***" portion of the Answer has expanded his stated position by asserting that, since the language of the appealed claims lacks timing details, Osborne can be interpreted as satisfying the claimed requirements. According to the Examiner, Osborne's disclosure can be interpreted as teaching that the same buffer can perform the store and retrieve functions, albeit at different times.

In our view, however, even assuming, arguendo, the Examiner's postulation concerning Osborne's buffer functions is correct, we fail to see how such an interpretation would satisfy

the language of claims 1, 5, and 8 which requires that buffer read access of at least one channel is restricted to only a respective buffer. We also agree with Appellant (Reply Brief, page 7) that the Examiner's reference to channel 0 of Appellant's disclosure, which is described as writing to a plurality of buffers, as supporting the Examiner's position is misplaced. As pointed out by Appellant, it is channels 1, 2, and 3 that have restricted read access to a respective buffer, while channel 0 controls the storage of data in one of a plurality of buffers.

In view of the above discussion, since the Examiner has not established a prima facie case of obviousness, the 35 U.S.C. § 103(a) rejection of independent claims 1, 5, and 8, as well as claims 2-4, 6, 7, 9-11, and 14 dependent thereon, is not sustained.

We also do not sustain the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 12, 13, and 15 based on Osborne. These claims differ slightly from independent claims 1, 5, and 8 discussed supra by requiring that "each of said channels is able only to write to or read from at least one of said plurality of buffers." As disclosed by Appellant in the example illustrated in Figure 4(a), channel 0 is able only to write to at

least one of the buffers 770-778 while each of channels 1, 2, and 3 is able to only read from at least one the buffers 770-778. In addressing the language of claims 12, 13, 15, the Examiner again relies on the interpretation of Osborne that suggests that, since the same buffer can store and retrieve data at different times, the claimed limitations are satisfied. Similar to our earlier discussion, we do not see any reasonable interpretation of Osborne that would support the conclusion that, merely because a single buffer may be used to store and retrieve data at different times, a limitation that restricts particular channels to a read or a write operation to at least one of a plurality of buffers would be met.

In conclusion, we have not sustained the Examiner's 35 U.S.C. § 103(a) rejections of any of the claims on appeal. Accordingly, the decision of the Examiner rejecting claims 1-15 is reversed.

REVERSED

JOSEPH F. RUGGIERO Administrative Patent Judge	)	
ANITA PELLMAN GROSS Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LANCE LEONARD BARRY Administrative Patent Judge	)	

JFR:hh

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