

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* EDWARD A. WOLFF, PETER R. MOLNAR,  
AYMAN ELEZABI, and GERALD GEORGE PECHANEK

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Appeal 2008-0241  
Application 10/282,919  
Technology Center 2100

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Decided: August 29, 2008

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Before LANCE LEONARD BARRY, HOWARD B. BLANKENSHIP, and  
THU A. DANG, *Administrative Patent Judges*.

BLANKENSHIP, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 2, 4-18, and 20-32, which are all the claims remaining in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellants' invention relates to techniques for performing a bit rake instruction in a programmable processor. (Abstract.) Claim 17 is illustrative.

17. A method for executing a bit rake instruction comprising:  
receiving the bit rake instruction;  
decoding the bit rake instruction defining a source register, a mask register and a target register;  
extracting a pattern from the source register based on a mask provided from the mask register by a processor apparatus; and  
packing and justifying the pattern into the target register by a processor apparatus, the processor apparatus including a hierarchical data path and a hierarchical mask path, the hierarchical mask path comprising two or more stages, the output of each stage controlling whether to justify the pattern at a corresponding stage of the hierarchical data path.

The Examiner relies on the following references as evidence of unpatentability.

Cohen	US 5,781,457	Jul. 14, 1998
Steele	US 6,715,066 B1	Mar. 30, 2004
		(filed Apr. 7, 2000)

Claims 1, 2, 4-13, 16-18, 20-29, and 32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Steele.<sup>1</sup>

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<sup>1</sup> The rejection indicates, without explanation, that Steele is a reference under § 102(b). Steele issued March 30, 2004 after its filing in the USPTO on April 7, 2000. The instant application filing date is October 29, 2002, with priority claimed to a provisional application filed November 1, 2001. On this record, Steele is a reference under § 102(e), which we assume to be the proper basis for the rejection.

Claims 14, 15, 30, and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Steele and Cohen.

Based on Appellants' arguments in the Appeal Brief, we will decide the appeal of the § 102 rejection over Steele on the basis of claim 17 alone. *See* 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner reads claim 17 on Steele as set forth at pages 5 and 6 of the Answer. Appellants argue, however, that Steele does not disclose the hierarchical mask path comprising two or more stages, the output of each stage controlling whether to justify the pattern at a corresponding stage of the hierarchical data path. (App. Br. 6-7.)

The Examiner, in response, reiterates that the claimed "two or more stages" are deemed to read on the three-stage adder tree depicted in Figure 1A of Steele. (Ans. 12.) The Examiner, in addition, explains why the apparatus of Steele is found to "justify the pattern" within the meaning of the claims. (*Id.*)

The Examiner further finds that the first stage adder in Steele provides control signals to the first and second stage shifters, the second stage adder provides control signals to the first through third stage shifters, and the third stage adder provides control signals to the first through fourth stage shifters of the hierarchical data path, referring to specific passages in columns 10 and 11 of the reference. (Ans. 12-13.)

While each of the three adder stages send control signals to multiple corresponding shifter stages within the hierarchical data path, each of the three adder stages still provides a control signal to its [sic] corresponding shifting stage within the hierarchical data path. Thus, Steele correctly reads upon "the

output of each stage controlling whether to justify the pattern at a corresponding stage of the hierarchical data path.”

(Ans. 13.)

Appellants respond, in turn, by reproducing the referenced material at columns 10 and 11 of the reference, and submit the following analysis.

[E]ach of Steele’s binary signals controls a shift column in one of multiple stages of the shift element 12. Each adder stage of Steele’s control element 11 generates multiple signals which are distributed among multiple stages of the shift element 12 to control the shift columns of the shift element 12.

Consequently, there is no adder stage in Steele that controls whether to justify the pattern at a corresponding stage of the hierarchical data path. It is only through the use of the combination of Steele’s adder signals from multiple different adder stages of the control element 11 that all the columns of a stage of the shift element 12 are controlled.

(Reply Br. 3.)

In our estimation, the Examiner and Appellants are in substantial agreement with respect to how the Steele apparatus operates. With respect to what the claims require, however, we find the Examiner’s position to be eminently reasonable and not shown to be wrong by Appellants’ arguments. Appellants have not demonstrated how the argued language of instant claim 17 might serve to distinguish over the prior art.

We understand, as does the Examiner, differences exist between the instant invention as disclosed and the Steele disclosure. However, the briefs’ pointing out differences between the instant disclosure (e.g., Figs. 3A and 3B) and Steele does not persuade us of error in the rejection. The *claims* measure the invention. *See SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d

1107, 1121 (Fed. Cir. 1985) (en banc). Our reviewing court has repeatedly warned against confining the claims to specific embodiments described in the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc). During prosecution before the USPTO, claims are to be given their broadest reasonable interpretation, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989); *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969). “An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.” *In re Zletz*, 893 F.2d at 322.

Not persuaded of error in the Examiner’s finding of anticipation, we sustain the rejection of claims 1, 2, 4-13, 16-18, 20-29, and 32 under 35 U.S.C. § 102(e) as being anticipated by Steele.

We will decide the § 103(a) rejection over Steele and Cohen on the basis of claim 30 alone. *See* 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner sets forth specific findings, in the Final Rejection and the Answer, in support of why the combination of teachings is considered to demonstrate the obviousness of the subject matter of claim 30. Rather than providing any basis to question any of the Examiner’s findings, Appellants make general allegations and submit that the Examiner’s “approach” is “not the claimed approach” and that “[n]othing in the cited references indicates a recognition of the problems addressed by the present invention.” (App. Br. 8.)

In *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1739 (2007), the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test.

In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) (emphasis added)), and reaffirmed principles based on its precedent 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.” *Id.* The Court explained:

When 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, § 103 likely bars its patentability. For the same reason, 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 unless its actual application is beyond his or her skill.

*Id.* at 1740. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

In addition to ignoring the Examiner’s rationale for the proposed combination, Appellants’ arguments do not demonstrate anything

unpredictable or surprising to the artisan in the step of claim 30. Moreover, the motivation for combining reference teachings is not limited to the problems addressed by Appellants. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *In re ICON Health and Fitness Inc.*, 496 F.3d 1374, 1380 (Fed. Cir. 2007) (quoting *KSR*, 127 S. Ct. at 1742).

We are therefore not persuaded of error in the Examiner’s case for prima facie obviousness of the claimed subject matter. We sustain the rejection of claims 14, 15, 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Steele and Cohen.

#### CONCLUSION

The rejection of claims 1, 2, 4-18, and 20-32 under 35 U.S.C. § 102(e) or 103(a) is affirmed.

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

AFFIRMED

rwk

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