

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte GARY R. JOHNSON

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Appeal No. 2000-0112  
Application No. 08/935,005

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ON BRIEF

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Before CALVERT, COHEN, and FRANKFORT, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 5, 6, 8 and 9 as amended in the amendment after final rejection filed April 12, 1999 (Paper No. 12), which are all of the claims pending in this application. Claims 1-4 and 7 have been canceled.

Appeal No. 2000-0112  
Application No. 08/935,005

We REVERSE.

BACKGROUND

The appellant's invention relates to a particular form of horizontally structured printed and electronic text, and the method of formatting such horizontally structured printed and electronic text. An understanding of the invention can be derived from a reading of exemplary claims 5 and 8, which read as follows:

5. A method of formatting horizontally structured printed and electronic text, comprising:

reversing the word sequence on a second line of the text and every other line thereafter so the reader when finished reading a first line from left to right drops his/her eyes directly below to begin reading the second line from right to left, continuing in this alternating fashion of reading left to right, right to left until finished reading all lines of the text; and

arranging all letters in each word form[sic] left to right in all lines of text.

8. Horizontally structured printed and electronic text, comprising a first line of text in which the word sequence is left to right followed by a second line of text in which the word sequence is right to left and all letters are[sic] in each word are arranged from left to right in both lines of text.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Huang 89105689.0 October 3, 1990  
(Published Chinese Application)<sup>1</sup>

Diamond, Jared (Diamond), "Reflections, The Case of the  
Vagrant Birds--or, Left Coast, Here We Come", Discover, pp.  
82-84, (January, 1986)

Claims 5, 6, 8 and 9 stand rejected under 35 U.S.C. § 103  
as being unpatentable over Huang.

Claims 5, 6, 8 and 9 also stand rejected under 35 U.S.C.  
§ 103 as being unpatentable over Diamond.<sup>2</sup>

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<sup>1</sup> Our understanding of this foreign language document is based upon a translation prepared for the U.S. Patent and Trademark Office. A copy of that translation accompanies this decision. In the translation, Examples 1 and 2 do not reflect an accurate translation of the format of the printed material in the Chinese reference since the translator has put the text into idiomatic English instead of providing a literal translation of Examples 1 and 2. A subsequently obtained literal translation of Example 1 representing the horizontal typesetting method in Huang is also attached.

<sup>2</sup> We note, that the rejections of claims 5, 6, 8 and 9 under 35 U.S.C. § 101, and 35 U.S.C. § 112, in the Final Rejection (Paper No. 11, February 2, 1999), have been withdrawn by the examiner in her answer (Paper No. 19, August 16, 1999).

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the answer (Paper No. 19, mailed August 16, 1999) for the examiner's complete reasoning in support of the rejections, and to the appellant's brief (Paper No. 18, filed July 12, 1999) and reply brief (Paper No. 20, filed September 10, 1999) for the arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejections of claims 5, 6, 8 and 9 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt

that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

With this as background, we turn to the examiner's rejections of independent claims 5 and 8, the only independent claims on appeal.

We agree with appellant that all the limitations recited in independent claims 5 and 8 are not met by the teachings of either Huang or Diamond. In particular, it is clear that the prior art fails to teach or suggest alternate lines of text which are oppositely oriented, in which all letters in each word are arranged from left to right in all lines of text. Nor, does the prior art teach or suggest the method step of arranging all letters in each word from left to right in oppositely oriented alternate lines of text.

Looking first at the Huang reference, we observe that it discloses a method of horizontal typesetting for printing that involves arranging a first row of Chinese characters from left to right, a second row of Chinese characters from right to left, and so on, until completion of the entire text. Huang goes on to explain that in reading the text one would read the first line from left to right, proceed from the right to the left in reading the second line, and so on, until completion.

The examiner determined (final rejection, p. 4) that Huang lacks the claimed limitation that all letters in each

word are arranged from left to right in both lines of text  
(appellant's

claim 8), and the claimed step of arranging all letters in each word from left to right in all lines of text (appellant's claim 5), and

that the characters are letters and the steps of arranging the letters in each word from left to right would have been an obvious matter of design choice once the use of characters were known as in the Chinese patent since Applicant has not disclosed that using letters as characters and the steps of arranging the characters in each word from left to right solves any stated problem and the invention of the Chinese patent would be capable of performing the same as well.

Appellant argues (brief, pp. 6-10 and reply brief, pp. 1-2) that to arrange the letters in each word from left to right in all lines of text, where alternate lines of text are oppositely oriented, is not an obvious matter of design choice in the use of Chinese characters as in Huang. Appellant further points out (brief, p. 9) that "[t]he examiner has not cited any evidence to support this proposition." We agree.

In alternate lines of text (i.e., Example 1, lines 2, 4 and 6) in the invention of Huang, the Chinese characters begin at the right, and progress from right to left across the

page.<sup>3</sup> We see no teaching or motivation in the disclosure of Huang that would have suggested to one of ordinary skill in the art at the time the invention was made to re-position the characters in the lines of text that read from right to left, such that individual words would read from left to right. In our view, modification of the teachings of Huang in the manner urged by the examiner so as to arrive at the subject matter of claims 5 and 8 on appeal is based entirely on an impermissible hindsight reconstruction derived from appellant's own teachings.

Turning to the Diamond article (p. 84, column 1), it states:

Some writing, like that of the early Greeks, had alternate lines of left to right and right to left. (This form of writing is called boustrophedon, from the Greek words *bous*[ox] and *strophe*[turning], because it resembles the path of an ox as it plows successive furrows, turning at the end of each to start the next.)

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<sup>3</sup> See also, the attached literal translation of Example 1. We note that in alternate lines of text (i.e., lines 2, 4 and 6) not only do lines of text progress from right to left, but the letters in the individual words are arranged from right to left, as well.

The examiner determined (final rejection, p. 5) that Diamond, like Huang, lacks the claimed limitation that all letters in each word are arranged from left to right in both lines of text (appellant's claim 8), and the claimed step of arranging all letters in each word from left to right in all lines of text (appellant's claim 5), and

[t]hat the characters are letters and the steps of arranging the characters in each word from left to right and orientating[sic] the characters the same way in all lines of text would have been an obvious matter of design choice once the use of characters were known as in the Discover article[Diamond] since Applicant has not disclosed that using letters as characters and the steps of arranging the characters in each word from left to right and orientating[sic] the characters the same way in all lines of text solves any stated problem and the invention of the Discover article[Diamond] would be capable of performing the same as well.

Appellant argues (brief pp. 10-11) that to arrange the letters in each word from left to right in all lines of text, where alternate lines are oppositely oriented, is not an obvious matter of design choice of the use of characters in the boustrophedon style text noted in Diamond. Again, we agree.

In alternate lines of the boustrophedon text, noted in the article by Diamond, the characters begin at the right and progress from right to left across the page.<sup>4</sup> We see no teaching or motivation in the Diamond article that would have suggested to one of ordinary skill in the art at the time the invention was made to re-position the characters in the lines of text that read from right to left, such that individual words would read from left to right. As we concluded in our analysis of the examiner's rejection using Huang, it is our view that the teachings of the Diamond article, also relied upon by the examiner as suggesting the subject matter of claims 5 and 8, are only sufficient when modified with impermissible hindsight derived from appellant's own teachings.

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<sup>4</sup> In his brief (pp. 10-13 and appendix 6) appellant has supplied evidence that in boustrophedon writing where alternate lines of text progress from left to right and then right to left, etc., the characters in the lines of text reading from right to left face from right to left, or opposite to those characters in the lines of text reading left to right.

Since all the limitations of independent claims 5 and 8 are not taught or suggested by the applied prior art, the decision of the examiner to reject independent claims 5 and 8, and claims 6 and 9 dependent thereon, based on Huang or Diamond under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 5, 6, 8 and 9 under 35 U.S.C. § 103 is reversed.

REVERSED

IAN A. CALVERT	)	
Administrative Patent Judge	)	
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	)	
	)	
	)	BOARD OF PATENT
IRWIN CHARLES COHEN	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
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	)	
CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	

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