

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID L. HECHT and L. NOAH FLORES

Appeal No. 1997-2690
Application No. 08/532,040

ON BRIEF

Before HAIRSTON, JERRY SMITH, and GROSS, Administrative Patent Judges.

GROSS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 5, which are all of the claims pending in this application.

Appellants' invention relates to a record for storing encoded digital information. The record includes a self-clocking data code pattern of glyphs for encoding the

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information and an additional code pattern to disambiguate between data codes that are rotated 0E and 180E. Both patterns are spatially distributed in nominal accordance with a predetermined spatial formatting rule. The additional code pattern is formed of an asymmetric digital code sequence.

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

1. An optically readable record for storing encoded digital information; said record comprising

a recording medium;

a self-clocking data code pattern for encoding said information; said data code pattern being composed of glyphs that are written in a two dimensional code field on said recording medium on centers that are spatially distributed in nominal accordance with a predetermined spatial formatting rule; said glyphs being defined by respective symbols that are selected from a finite set of optically discriminable symbols to encode said digital information; and

at least one additional code pattern that is written on linearly aligned centers on said recording medium in nominal accordance with said spatial formatting rule, said additional code pattern being composed of glyphs which are selected from said finite set of symbols in accordance with a predetermined, asymmetric digital code sequence, whereby said asymmetric code sequence disambiguates between data codes that are rotated 0E and 180E, even though said data code pattern and said additional code pattern are composed of glyphs that provide a substantially uniform visual appearance.

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

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Sant'Anselmo et al. (Sant'Anselmo) 08, 1990	4,924,078	May
Bloomberg et al. (Bloomberg) 25, 1992	5,091,966	Feb.

Claims 1 through 5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bloomberg in view of Sant'Anselmo.

Reference is made to the Examiner's Answer (Paper No. 15, mailed February 7, 1997) for the examiner's complete reasoning in support of the rejection, and to appellants' Brief (Paper No. 14, filed November 26, 1996) for appellants' arguments thereagainst.

OPINION

We have carefully considered the claims, the applied prior art references, and the respective positions articulated by appellants and the examiner. As a consequence of our review, we will reverse the obviousness rejection of claims 1 through 5.

Appellants' sole argument regarding claim 1 is that Sant'Anselmo teaches a geometric asymmetry, not an asymmetric digital code sequence, as required by the claim (Brief, page 5). Therefore, even if Sant'Anselmo were combined with Bloomberg, appellants contend (Brief, page 5) that the combination would not meet all of the recited limitations.

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The examiner, on the other hand, asserts (Answer, page 4) that "Sant'Anselmo discloses an asymmetrical code border which indicates the orientation of the code pattern," and that "the combination of Bloomberg and Sant'Anselmo would in fact suggest to a skilled artisan a 'glyph' type code pattern with an asymmetrical pattern."

We agree with the examiner that Sant'Anselmo teaches the use of an asymmetrical pattern of glyphs for orienting the code pattern. However, we do not agree that Sant'Anselmo suggests the use of an asymmetrical digital code sequence, as claimed. The distinction is subtle. Sant'Anselmo's orientation pattern of border 16 and external orientation cells 120 has a spatial or geometric configuration that is not symmetric, as shown in Figures 11 and 12. The individual cells in the orientation pattern, though, are all typically "on" data cells (see column 2, lines 52-64). Thus, the digital code sequence forming the orientation pattern is a sequence of ones (1111...), for example, which is symmetric. As neither Bloomberg nor Sant'Anselmo discusses or suggests forming the orientation pattern of a digital code sequence that is asymmetric, the combination of Bloomberg and Sant'Anselmo fails to meet every limitation of the claim.

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Consequently, we cannot sustain the rejection of claim 1, nor any of its dependents, claims 2 through 5.

CONCLUSION

The decision of the examiner rejecting claims 1 through 5 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JERRY SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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