

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ROY TREVINO

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Appeal No. 1999-2690  
Application 08/720,563

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ON BRIEF

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Before RUGGIERO, LALL, and BLANKENSHIP, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-9, which are all of the claims pending in the present application. An amendment filed September 21, 1998 after final rejection, which amended claim 4, was approved for entry by the Examiner.

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The disclosed invention relates to a method and apparatus for providing variable exposure time in each row of complementary metal-oxide semiconductor (CMOS) sensors in a CMOS sensor array. A pair of rotating "pointers" are utilized to independently trigger the resetting and reading-out of the charges contained in each of the cells in each row of the sensor array.

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

1. A method for controlling a CMOS sensor array containing a first line of CMOS sensor cells arranged in a linear fashion, comprising the steps of:

receiving a clock signal and generating a first address;

generating a line reset signal to said first line of CMOS sensor cells based on said first address;

calculating line read delay based on said first address and an offset value;

generating a line read signal to said first line of CMOS sensor cells after said line read delay; and,

generating a set of pixel values containing a pixel value for each CMOS sensor cell in said first line of CMOS sensor cells.

The Examiner relies on the following prior art:

Wilder et al. (Wilder)	5,262,871	Nov. 16, 1993
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Claims 1-9 stand finally rejected under 35 U.S.C. § 102(b) as being anticipated by Wilder.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Brief (Paper No. 10) and Answer (Paper No. 11) for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of anticipation 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 Brief 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 Wilder reference fully meets the invention as set forth in claims 1-9. Accordingly, we affirm.

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital

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Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to independent claim 4, addressed first in the Answer, the Examiner indicates (Answer, pages 3 and 4) how the various limitations are read on the disclosure of Wilder. In particular, the Examiner points to the illustrations in Wilder's Figures 2, 5A, 6-8, and 12A and the accompanying description at columns 10-18, 20, and 21. In our view, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has at least satisfied the burden of presenting a prima facie case of anticipation. The burden is, therefore, upon Appellant to come forward with evidence and/or arguments which persuasively rebut the Examiner's prima facie case. Only those arguments actually made by Appellant have been considered in this decision.

Arguments which Appellant could have made but chose not to make in the Brief have not been considered [see 37 CFR § 1.192(a)].

Appellant's arguments in response focus on the Examiner's alleged misinterpretation of the Wilder reference, which, in Appellant's view, has no disclosure of any circuitry which allows ". . . the reading of each pixel value in a set of CMOS sensor

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cells without merging the read signals." (Brief, page 4). After careful review of the Wilder reference in light of the arguments of record, however, we are in agreement with the Examiner's position as stated in the Answer.

Initially, we find that Appellant's arguments are not commensurate with the scope of the claim. It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Although Appellant asserts that Wilder's disclosed circuitry, pointing to the illustration in Wilder's Figure 6, has only a single horizontal sense line for each pixel in a row thereby prohibiting the simultaneous reading of each individual pixel, we find no language in appealed claim 4 which requires the simultaneous reading of sensor cells. Further, it is our view

that, even assuming arguendo that the language of claim 4 could be construed as calling for simultaneous cell read out, there is nothing in the claim language which precludes the simultaneous read out by merging or combining pixel values.

We are in further agreement with the Examiner (Answer, page 6) that Appellant's arguments ignore various portions of the disclosure of Wilder which clearly teaches the invention as claimed. While Wilder suggests an embodiment in which groups of pixel values are read by merging signals into a single superpixel value, other embodiments are also suggested in Wilder. At column 6, lines 4-64, Wilder discloses various read out techniques dependent on desired resolution including one cell at a time, more than one element per row at a time, and more than one element per column at a time.

We also find to be unpersuasive Appellant's further contention that Wilder, which allegedly discloses only the resetting of all of the horizontal sense lines, lacks a teaching of circuitry which permits the resetting of each cell array line independently as claimed. As with Appellant's earlier argument related to simultaneous cell read out, however, we find no language in the claims which require the independent resetting of sensor cells or any language which precludes the resetting of all

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sense lines. In any case, Wilder, as pointed out by the Examiner (Answer, page 7), provides a clear teaching of the resetting of each selected pixel to a predetermined starting initial voltage (Wilder, column 12, lines 60-62).

Similarly, Appellant's argument that Wilder lacks a teaching of independent control of the integration time of each row of the cell array is not reflected in the language of appealed claim 4. We also agree with the Examiner that, notwithstanding the lack of any recitation in the claims directed to independent integration time control, Wilder provides a clear disclosure of such a feature at column 17, line 46 to column 18, line 32.

In view of the above discussion, since all of the claimed limitations are present in the disclosure of Wilder, the Examiner's 35 U.S.C. § 102(b) rejection of claim 4, as well as dependent claims 5-8, not separately argued by Appellant, is sustained.

Turning to a consideration of the 35 U.S.C. § 102(b) rejection of independent claims 1 and 9 based on Wilder, we sustain the Examiner's rejection of these claims, and dependent claims 2 and 3 not separately argued by Appellant, as well. In asserting the patentability of claims 1 and 9, Appellant

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reiterates the argument directed to Wilder's lack of disclosure of simultaneous sensor cell read out, an argument which we found unpersuasive for all of the reasons discussed supra.

In summary, we have sustained the Examiner's 35 U.S.C. § 102( b) rejection of all of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-9 is affirmed.

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

AFFIRMED

JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
PARSHOTAM S. LALL	)	
Administrative Patent Judge	)	APPEALS AND
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	)	INTERFERENCES
	)	
HOWARD B. BLANKENSHIP	)	
Administrative Patent Judge	)	

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