UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SUDHAKAR BOBBA and TYLER THORP

Appeal No. 2006-1839
Application No. 10/071,379

ON BRIEF

Before THOMAS, BLANKENSHIP, and HOMERE, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appeal to the Board from the examiner's final rejection of claims 1 and 3 through 15, appellants having canceled claim 2.

Representative independent claim 1 is reproduced below:

1. An integrated circuit, comprising:

a signal driver that generates a signal on a signal path;

a first wire disposed adjacent to the signal path; and

shield control circuitry that, after a transition on the signal path, causes the first wire to transition to a value that causes a charge up of capacitance between the signal path and the first wire, wherein a subsequent transition on the signal path causes a discharge of capacitance between the signal path and the first wire.

The following references are relied on by the examiner:

Petschauer	5,596,506	Jan. 21, 1997
Ohkubo	6,285,208	Sep. 4, 2001

Claims 1 and 3 through 15 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Petschauer in view of Ohkubo.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief for appellants' positions, and to the answer for the examiner positions.

OPINION

For the reasons generally set forth by appellants in the brief and reply brief, in addition to our own set forth below, we reverse the rejection of all claims on appeal under 35 U.S.C. § 103. For the sake of simplifying our consideration here, we assume for the sake of argument that Petschauer is properly combinable within 35 U.S.C. § 103 with Ohkubo.

The claimed shield control circuitry in independent claim 1, as well as the shield control means in independent claim 12 and essentially the entire body of independent claim 13, are generally alleged by the examiner to be taught within the confines of

Ohkubo. It appears that the prior art showings in figures 2 and 3 of this reference correlate somewhat to appellants' prior art figures and the specification as filed to the extent that the shields G and V in these figures teach and show the use of shields with respect to a signal line F. The reference also shows that signal drivers B drive the signal line.

Ohkubo's contribution to the art is, as noted by the examiner in the answer, shown in figures 5, 10 and 11 in the various embodiments there, which respectively relate to Ohkubo's interference preventing section or circuitry. The interference preventing circuitry in figure 5 is basically the NAND circuits W whereas in figure 10 it is the logical NOR and inverter circuits W and in figure 11 it is the XOR circuit W. In any of these embodiments Ohkubo's circuits operate in such a manner that they are switched in the same phase as the input signal supplied to a specific signal wiring line. This is shown in figures 6 and 7, for example. The brief characterizes this at pages 9 and 10 such that the shield wires S in these figures transition with the respective signal lines F. At least in this respect, we agree with appellants' observation at the top of page 10 of the principal brief on appeal that this reference does not contain interference prevention circuitry which functions after a transition of a signal line as required by independent claim 1 on appeal, for example.

In addition to these considerations with respect to independent claim 1 on appeal as well as the subject matter of independent claims 12 and 13 on appeal, the essential function as revealed in the latter portion of the summary of the invention at the bottom of column 5 of Ohkubo is that the functionality of the interference preventing circuitry effectively shields the signal line by decreasing an interline capacitance between the specific signal wiring line in each of respective first and second shield wires. Again, this is achieved by keeping the interference preventing signal in the same phase with respect to the signal line itself; this is again repeated in the paragraph at the bottom of column 11 beginning at line 39 of Ohkubo. A more detailed discussion of this decrease in the interline capacitance is at columns 8 and 9 of this reference.

It appears to us that the net effect of the operation of the circuitry is that there is substantially no charging and discharging functions of the claims on appeal that occur in the circuitry of Ohkubo in the manner claimed since the interline capacitance is zero or substantially zero. Thus, we do not agree with the examiner's urgings in the responsive arguments portion of the answer as to the operability of Ohkubo reference as applied to the claims on appeal. As such, we cannot sustain the rejection of the independent claims 1, 12 and 13 on appeal and their respective dependent claims.

Therefore, the decision of the examiner rejecting all claims on appeal under 35 U.S.C. § 103 is reversed.

REVERSED

JAMES D. THOMAS Administrative Patent Judge	))))) BOARD OF PATENT
HOWARD B. BLANKENSHIP Administrative Patent Judge	)) APPEALS AND)) INTERFERENCES
JEAN R. HOMERE Administrative Patent Judge	))

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Osha Liang L.L.P./Sun
1221 McKinney, Suite 2800
Houston, TX 77010