

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KIMIKO GOTOH

Appeal No. 96-3440
Application 08/261,613¹

ON BRIEF

Before JERRY SMITH, CARMICHAEL, and RUGGIERO, Administrative Patent Judges.

CARMICHAEL, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of Claims 2 and 7-9. Claim 1 was canceled. The Examiner's Answer indicates that the other remaining claims, Claims 3-6 and 10, are directed to allowable subject matter.

Claim 7 reads as follows:

A low-voltage output driving circuit comprising:

¹ Application for patent filed June 17, 1994.

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a buffer stage comprising an input for connection to a control circuit and an output;

a pull-up transistor connected between the output and a power supply voltage source, said pull-up transistor having a control terminal for rendering said pull-up transistor conductive when activated;

a gate circuit having an input and an output, the input of said gate circuit being connected to the control circuit and the output of said gate circuit being connected to the control terminal of said pull-up transistor; and

a clamping transistor connected to the output and to the control terminal of said pull-up transistor at a node located in the connection between said gate circuit and said pull-up transistor, said clamping transistor having a control terminal for connection to the power supply voltage source and having respective input and output terminals, the input terminal of said clamping transistor being connected to the node between said gate circuit and the control terminal of said pull-up transistor and the output terminal of said clamping transistor being connected to the output of said buffer stage;

said clamping transistor when conductive maintaining the control terminal of said pull-up transistor at the output level of said buffer stage when the output level is higher than the level of the power supply voltage.

The examiner's Answer cites admitted prior art and the following prior art reference:

Tarng	5,280,200	Jan. 18, 1994
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OPINION

The claims stand rejected under 35 U.S.C. § 103 as unpatentable over admitted prior art in view of Tarng.

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The claimed invention is an improvement over the admitted prior art driving circuit shown in Figure 5 of the application. The improvement is the addition of a clamping transistor which maintains the control terminal of a pull-up transistor at the output level of a buffer stage when the output level is higher than the level of the power supply voltage.

According to the examiner, the improvement was suggested by Tarnng, who shows a clamping transistor MONC in Figure 10A.

In response, appellant argues:

The purpose of the recited "clamping transistor" is to maintain the control terminal of the "pull-up transistor" at the output level of the buffer stage when the output level is higher than the level of the power supply voltage V_{cc} . Although Tarnng shows that a "voltage clamping circuit" per se is generally known, the context in which the "voltage clamping circuit" is disclosed in Tarnng significantly differs from the purpose of the defined "clamping transistor" comprising a component of the "driving circuit" as defined in Claims 2-10 on appeal. Thus, Tarnng describes the "voltage clamping circuit" as illustrated in Figure 7 of the drawings thereof which includes parallel branches of serially connected CMOS transistors MCNO and MCPO in a first branch and MONC and MOPC in a second branch. It is not at all apparent from the Examiner's brief comments as to how he proposes to incorporate the voltage clamping circuit as disclosed in Figure 7 of Tarnng into the conventional driving circuit illustrated in Figure 5 of the drawings of this

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application on appeal. Appeal Brief at 10, lines 10-27.

We agree with appellant. The mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992).

First, Tarng employs a clamping transistor for reasons that appear inapplicable to the admitted prior art driver circuit. Column 1, lines 15-42. Second, even if there were motivation to combine the teachings of Tarng with the admitted prior art, we are left to speculate why the skilled artisan would employ Tarng's clamping transistor in the recited position and with the recited function. The only reason we can discern is improper hindsight reconstruction of appellant's claimed invention.

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Because we are unable to identify how the prior art suggested the desirability of the modification as required by *In re Fritch*, the rejection will not be sustained.

CONCLUSION

The rejection of Claims 2 and 7-9 is not sustained.

REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JAMES T. CARMICHAEL)	
Administrative Patent Judge)	APPEALS AND
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