

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FIBER-OPTICS CO., INC.

Appeal No. 99-0842
Application 90/003,765¹

ON BRIEF

Before HAIRSTON, FLEMING, and HECKER, **Administrative Patent Judges.**

HECKER, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 22, 24 and 26 through 36, which are

¹ Reexamination proceeding for U.S. Patent No. 5,257,020, issued October 26, 1993, of Control No. 90/003,765, filed March 23, 1995, based on Application 07/714,259, filed June 12, 1991. Variable Message Traffic Signalling Trailer.

Appeal No. 99-0842
Application 90/003,765

all of the pending claims in the above-identified reexamination of United States patent 5,257,020.

The claimed subject matter is directed to a traffic signaling trailer. The trailer includes a light emitting diode (LED) illuminated message sign; and the trailer mounted sign may be placed on or near the road in order to warn passing motorists of hazards lying ahead. In particular, referring to Figure 1, the invention includes a trailer 14 having a bed 16 and a superstructure 18. Message board 20 is mounted on the superstructure 18, and when in a generally horizontal stowed position, the message board 20 rests on a shock absorbing structure including two shock absorbing blocks 30 at ends of a flexible beam 28. The message board 20 is made up of a large number of light emitting diodes, and its internal temperature is continuously monitored by a thermostat which controls cooling fans.

Representative independent claim 1 is reproduced as follows:

1. A moveable traffic signaling trailer device, comprising
a trailer having wheels and adapted to be towed to a remote, exposed site and left in unattended, message-display-

Appeal No. 99-0842
Application 90/003,765

ing operation for periods of time, and a message board supporting structure mounted on said trailer,

a general purpose message board supported by said message board supporting structure of said trailer, for communicating to drivers of passing vehicles a user-selected alpha-numeric message, said message board including a plurality of picture elements (pixels) for displaying the message, said plurality of picture elements include light emitting diodes,

an operator interface mounted on said trailer, for programming the message to be displayed at the remote site at which said trailer is to be left in unattended, message-displaying operations, and

a controller supported by said trailer, connected to interact with said operator interface and connected to provide the programmed message to said message board.

The references relied on by the Examiner are as follows:

Okuno	4,298,869	Nov. 3, 1981
Iino	4,886,328	Dec. 12, 1989

Multisonics WINKO-MATIC Generation III User's Manual (1981)²

Claims 1 through 22 and 28 through 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Multisonics Winko-matic Generation III User's Manual (hereinafter Gen III) in view of Okuno.

² While some drawings of this manual bear later dates, Appellant understands and believes that everything disclosed in the particular manual relied upon by the Examiner was indeed available and in the prior art as of approximately 1981. (See Appellant's reply brief at pages 1 and 2.)

Appeal No. 99-0842
Application 90/003,765

Claims 24, 26, 27 and 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Gen III in view of Okuno and further in view of Iino.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the brief, reply brief and the answer for the details thereof.

OPINION

After a careful review of the evidence before us, we will sustain the Examiner's rejection of claims 1 through 15, 17 through 22, 28, 30 through 33 and 35 under 35 U.S.C. § 103. However, we will not sustain the rejection of claims 16, 24, 26, 27, 29, 34 and 36 for the reasons set forth *infra*.

At the outset, we note that Appellant has indicated on page 4 of the brief the groupings of the claims. In particular, Appellant states that (1) claims 1 through 15, 17 through 22, 28 through 33 and 35 stand or fall together; (2) Claims 24, 26, 27 and 36 stand or fall together; and (3)

Appeal No. 99-0842
Application 90/003,765

Claims 16 and 34 stand or fall together. These groups of claims do not stand or fall together.³

With regard to the rejection of claim 1 (representative of group 1 claims) under 35 U.S.C. § 103 as being unpatentable over Gen III in view of Okuno, the Examiner states:

[I]t is agreed with the patent owner/requester that Gen III discloses all of the claimed features except for the message board including a plurality of light emitting diodes to display the message (note pages 1-3 of the request). Okuno discloses a light emitting diode display in the form of traffic or road messages (note Figures 1A to 1C, note col. 3 lines 64-68 and col. 4 lines 1-13). (Answer at page 4.)

This is acknowledged by Appellant at page 3 of the reply brief where it is stated:

Similarly in this case, it is admitted that all of the elements of the independent claims were known in the prior art,[] and , particularly when guided by hindsight, the invention may ap-

³ We understand this to mean that the claims of each group stand or fall together, but the three groups do not stand or fall together. Also, since claim 29 depends indirectly from independent claim 24 (group 2), we will treat claim 29 as standing or falling with claim 24 (group 2), not as Appellant has indicated, with independent claims 1 and 28 (group 1).

Appeal No. 99-0842
Application 90/003,765

pear "seemingly simple." However, no prior art reference shows or suggests Appellant's combination of those elements.

Thus, since all recited claim limitations are found in the various references (i.e., Gen III and Okuno), the question is whether it would have been obvious to combine these references. The Examiner must set forth a **prima facie** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. **In re Sernaker**, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983).

The Examiner states:

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a light emitting diode display as was taught by Okuno in the device of Gen III since Okuno teaches that the use of light emitting diodes in place of incandescent light bulbs would improve power efficiency and service life and are low in cost of manufacture. (Answer at page 4.)

Appellant argues:

Appeal No. 99-0842
Application 90/003,765

The message board [of Applicant's] utilizes light-emitting diodes, which have a longer service life, compared to prior art traffic signaling message boards, and which are generally more durable and shock resistant when compared, e.g., to incandescent lamps. (Brief at page 4.)

As noted by the Examiner, Okuno provides the same reasons given by Appellant for replacing incandescent lamps in traffic message signs, wherein Okuno states at column 3, line 64 through column 4, line 2:

In the past, the light sources of these light-emitting display devices have been mostly incandescent lamps. According to the present invention, these light sources are constructed by light-emitting diodes to improve power efficiency and service life, to provide display devices which can save electric power, are of greater safety and which are low in cost of manufacture.

Accordingly, we find the Examiner has made a strong ***prima facie*** case for combining Gen III with Okuno, to replace Gen III's incandescent lamps with the light-emitting diodes of Okuno. Appellant further notes that:

While certainly not dispositive, the fact remains that both Gen III, which has drawings dated from 1981, and Okuno, which issued on November 3, 1981, were available to the public, including those of ordinary skill in the art, for about 10 years prior

Appeal No. 99-0842
Application 90/003,765

to disclosure of Appellant's claimed invention.
(Brief at pages 5-6.)

We agree with Appellant, the 10 years, in and of themselves, is not dispositive. We could offer many reasons to explain the passage of 10 years, but such conjecture would be unfair to Appellant and contrary to the ordinary rules of evidence. However, without objective evidence of long felt need, repeated failures, unexpected results, etc., the sole passage of 10 years is insufficient to rebut the Examiner's *prima facie* case of obviousness.

Next, Appellant presents evidence of secondary considerations⁴ of commercial success and copying to rebut the Examiner's *prima facie* case.

A nexus is required between the merits of the claimed invention and the evidence offered, if that evidence is to be given substantial weight en route to a conclusion on the obviousness issue. *Cable Elec. Prods. v. Genmark, Inc.*, 770 F.2d 1015, 1026, 226 USPQ 881, 887 (Fed. Cir. 1985). The burden of proof as to nexus resides with the patentee. In meeting its burden, the patentee must come forward with

⁴ Presented in Appellant's Declaration received November 6, 1995 and Supplemental Declaration received May 17, 1996.

Appeal No. 99-0842
Application 90/003,765

evidence sufficient to constitute a **prima facie** case of the requisite nexus. Appellant has not identified a particular feature of his invention that is responsible for its success. Instead, Appellant generally asserts that "the unit sold was identical to the variable message traffic signalling trailer described in the instant patent." (Brief at page 6.) Also, at page 8 of the brief,

It is readily apparent from the evidence of record that all of the commercial interest in message trailers of Appellant's invention can be traced to the Appellant's efforts to **market** those message trailers, beginning with his successful discussions with the Suffolk County Police Department, from which all of the subsequent commercial interest, and success, grew. (Emphasis added.)

We fail to see a nexus between any feature of the claimed invention and its commercial success. The fact that the one sold was described in the patent does not provide the nexus between the invention's attributes and the reason for the sale, nor does marketing efforts. In fact, according to Appellant's evidence, the first one sold because there were no other bids. Even if a nexus were shown, we question the evidence of commercial success. Proof of commercial success

Appeal No. 99-0842
Application 90/003,765

is not simply a matter of producing sales figures. The patentee must be prepared with evidence of market share, growth in market share, and replacement of earlier sales by others. **Kansas Jack, Inc. v. Kuhn**, 719 F.2d 1144, 1151, 219 USPQ 857, 861 (Fed. Cir. 1983). In the **ex parte** process of examining a patent application, the PTO lacks the means or resources to gather evidence which supports or refutes the applicant's assertion that sales constitute commercial success. Consequently, the PTO must rely upon the applicant to provide hard evidence of commercial success. Evidence related solely to the number of units sold provides a very weak showing of commercial success, if any. Also, the personal opinion of the applicant as to nexus is insufficient; there must be some evidence showing that the customer bought the device because of features of the claimed invention. **In re Huang**, 100 F.3d 135, 139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996). Thus, we find insufficient evidence of commercial success to rebut the Examiner's **prima facie** case of obviousness.

With regard to Appellant's evidence of copying, access in combination with similarity can create a strong

Appeal No. 99-0842
Application 90/003,765

inference of copying, however, something more is needed to make that action significant to a determination of the obviousness issue. Copying may demonstrate a general lack of concern for patent property, or a contempt for the specific patent in question--which could be argued to show obviousness; or a contempt for the ability or willingness of the particular patentee to enforce that patent--which would require deeper inquiry. Even widespread copying in the industry, as alleged by Appellant, could point to other conclusions, depending on the attitudes existing toward patent property and the accepted practices in the industry. **Cable Elec. Prods. v. Genmark, Inc.**, 770 F.2d 1015, 1028, 226 USPQ 881, 889 (Fed. Cir. 1985). Just as in the case of commercial success, a nexus is required between the copying and the merits of the invention. We find no such nexus in Appellant's evidence, and therefore insufficient support to rebut the Examiner's **prima facie** case of obviousness.

More significantly, Appellant's evidence appears counter to copying, and instead supports the concept of independent development. Independent creation of the invention by others may be an indication of obviousness

Appeal No. 99-0842
Application 90/003,765

especially when it is contemporaneous with, not well after, the work of the patentee. **Stewart-Warner Corp. v. City of Pontiac**, 767 F.2d 1563, 1570, 226 USPQ 676, 680 (Fed. Cir. 1985). Appellant indicates that Addco submitted a bid and model in late 1990 or early 1991. (Brief at page 7.) This is prior to Appellant's patent application, filed June 12, 1991. Also, the various "requests for bids" specified a trailer mounted message sign with **LED's**⁵. These requests for bids were published prior to Appellant's patent application, and prior to Appellant's published patent, issued October 26, 1993.

After weighing all of Appellant's secondary evidence of nonobviousness, singularly and in its totality, we find it insufficient to rebut the Examiner's **prima facie** case for the combination of Gen III and Okuno. Therefore, we will sustain the rejection of claim 1. Since claim 1 is representative of the group 1 claims, which stand or fall together, we likewise

⁵ The request for bid, 0/47298, dated 11/29/90, recites an attached specification part I, A through L. Although the attached specification was not included with the evidence submitted by Appellant/Declarant, Appellant's responsive specification lists "L. L.E.D.'s per pixel, 4 L.E.D.'s - 18". Also, request for bid 3228, dated 12/5/90, lists item #3 as a Light Emitting Diode Sign.

Appeal No. 99-0842
Application 90/003,765

sustain the rejection of claims 2 through 15, 17 through 22, 28, 30 through 33 and 35.

Turning to the group 2 claims, we will look at claim 24 as representative thereof. Claim 24 recites in part "said message board comprising a thermostat connected to at least one cooling fan, for cooling said message board." The Examiner states that:

Gen III in combination with Okuno discloses all of the claimed features except for the message board including a thermostat connected to at least one cooling fan. Iino discloses a display apparatus in which a display (103) is automatically cooled by a fan (i.e. blower 38) when a temperature (42) goes above a predetermined level (note col.5 lines 9-19). Since any type of display board which operates for many hours has the potential to overheat, and Iino teaches the concept of using a thermostat and cooling fan to protect a display from overheating (note col. 5 lines 47-65), one of ordinary skill in the art would have readily recognized that to use a thermostat and cooling fan in any type of long running electric display, such as the display device of Gen III and Okuno, would protect the display from overheating and also prevent the need for more maintenance. (Answer at pages 5-6.)

Appellant argues:

Iino discloses a display apparatus, installed in the dashboard of an automobile, for displaying, e.g., speed and

Appeal No. 99-0842
Application 90/003,765

rpm of the vehicle. The display apparatus includes an LCD cell backlit by a light source 103b, which in the drawings is represented as an incandescent bulb. A blower 38 is provided "for preventing the LCD cell 103d from being thermally destructed by the heat generated by the light source 103b." [col 4, lines 31-33]... Iino's teaching of a blower to protect an LCD, known for sensitivity to heat, from the heat of the associated incandescent backlight, known for generating heat, has no relationship to either of the cited prior art devices, nor to Appellant's invention. (Brief at page 11.)

We agree with Appellant. Iino protects an LCD from heat generated by its associated incandescent backlight using a blower 38 and temperature detecting element 42. However, were Iino to use an alternative display device, e.g., light emitting diode or fluorescent display tube, a blower and temperature detector would not be used as stated at column 10, lines 2-10, wherein it states,

the present invention can be applied effectively also to any apparatus wherein a display image produced by an arbitrary display device constituted, for example, from a light emitting diode or a fluorescent display tube other than such a liquid crystal display element is projected on a front glass. In this case, there is not necessity of provision of a light source for illuminating the back of the display device, and **hence there is no**

Appeal No. 99-0842
Application 90/003,765

***necessity of provision of thermally
protective means.*** (Emphasis added.)

We fail to see any motivation to combine Iino with the Gen III/Okuno combination, to cool an LED with a fan. Quite the opposite, Iino would delete the use of a fan if an LED embodiment were used. For these reasons, we will not sustain the rejection of claim 24, and likewise, claims 26, 27 and 29 which depend therefrom. Since claim 36 recites the same fan cooling and associated elements, we will not sustain the rejection of this claim. Thus, we will not sustain the rejection of all group 2 claims.

This brings us to the last set of claims, group 3, consisting of claims 16 and 34. These claims recite in part:

said shock absorbing structure comprises shock absorbing blocks mounted at opposite ends of a flexible beam attached to the superstructure.

The Examiner states:

Since it is a major concern to protect the signaling device when being towed to a site, lacking any criticality, it would have been obvious to one of ordinary skill in the art to include the use of a shock absorbing structure in addition to the hitch pins, leveling jacks, cotter pins, tongue jack and safety chains, in order to further insure protection to the message

Appeal No. 99-0842
Application 90/003,765

board when not in use, i.e. the stowed position. (Answer at page 5.)

The Appellant replies:

Specifically, as the Examiner has agreed, none of the references describes a trailer having a message sign mounted upon a shock absorbing structure having shock absorbing blocks mounted at opposite ends of a flexible beam attached to the trailer superstructure.

Lacking citation of any reference teaching or, in proper combination with other prior art references, suggesting the claimed combination of features, we submit that claims 16 and 34 are patentable over the prior art. (Brief at page 10.)

We agree with Appellant, and are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference, common knowledge or unquestionable demonstration. Our reviewing court requires this evidence in order to establish a ***prima facie*** case. ***In re Knapp-Monarch Co.***, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); ***In re Cofer***, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Thus, we will not sustain the rejection of claims 16 and 34 (group 3). Since these claims are dependent claims, our decision is based on the limitations

Appeal No. 99-0842
Application 90/003,765

contained within these claims combined with all limitations in the claims from which they depend.

In view of the foregoing, the decision of the Examiner rejecting claims 1 through 15, 17 through 22, 28, 30 through 33 and 35, under 35 U.S.C. § 103 is affirmed; however, the decision of the Examiner rejecting claims 16, 24, 26, 27, 29, 34 and 36 under 35 U.S.C. § 103 is reversed.

Appeal No. 99-0842
Application 90/003,765

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

AFFIRMED-IN-PART

	KENNETH W. HAIRSTON)	
	Administrative Patent Judge)	
)	
)	
)	BOARD OF
PATENT	MICHAEL R. FLEMING)	
APPEALS)	
	Administrative Patent Judge)	AND
)	INTERFERENCES
)	
	STUART N. HECKER)	
	Administrative Patent Judge)	

Appeal No. 99-0842
Application 90/003,765

SNH/cam

Appeal No. 99-0842
Application 90/003,765

cc:

Timothy A. French
FISH & RICHARDSON
225 Franklin Street
Boston, MA 02110-2804