

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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*Ex parte* JOSEPH WNUK

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Appeal No. 2002-0543  
Application No. 09/118,629

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ON BRIEF

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Before HAIRSTON, BARRY, and LEVY *Administrative Patent Judges*.  
BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

A patent examiner rejected claims 1 and 3-10. The appellant appeals therefrom under 35 U.S.C. § 134(a). We affirm.

BACKGROUND

The invention at issue on appeal illuminates a switch assembly for a vehicle. Modern vehicles include electrical input switches for locking and unlocking doors, opening and closing windows, and controlling seats. Such a switch may include backlighting to help an occupant locate the switch in the dark; the backlighting is operated simultaneously with the vehicle's headlights. When the headlights are

switched on, a switch is backlit by a bulb or light emitting diode underneath the switch. When the headlights are switched off, the backlighting is also switched off. (Spec., Background of the Invention.<sup>1</sup>)

Although backlit switches are easy to locate in the dark, the appellant observes two "illumination deficiencies." (*Id.*) First, when the vehicle's headlights and, therefore, its backlighting, are off at dusk, locating a switch "may be difficult." (*Id.*) Second, continuously backlit switches "may create nighttime glare problems." (*Id.*)

Accordingly, the appellant's invention includes a switch for controlling a vehicular accessory, a light for illuminating the switch, and a sensor for actuating the light responsive to detecting an object near the switch. "Preferably, the switch is illuminated only when a hand of a vehicle occupant is placed within a predetermined distance of the switch." (*Id.*, Summary of the Invention.)

A further understanding of the invention can be achieved by reading the following claim.

1. A switch assembly for a vehicle comprising:  
a switch for producing a signal to control a vehicle accessory;

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<sup>1</sup>The appellant should number the pages of his briefs.

a light for illuminating said assembly;

a proximity sensor for actuating said light in response to detecting an object in proximity to said switch; and

a control including a one-shot timer circuit for receiving an actuation signal from said sensor when an object is detected in proximity to said switch and for actuating said light for a predetermined period of time in response to said actuation signal.

Claims 1, 3, and 4 stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,434,757 ("Kashiwagi"); Japanese Patent No. 8-113098 ("Takabe");<sup>2</sup> and *Circuit Design for Electronic Instrumentation* 253-55 (2d ed. 1987) ("Wobschall"). Claim 5 stands rejected under § 103(a) as obvious over Kashiwagi; Takabe; Wobschall; and U.S. Patent No. 4,788,630 ("Gavagan"). Claim 6 stands rejected under § 103(a) as obvious over Kashiwagi; Takabe; Wobschall; and U.S. Patent No. 5,833,048 ("Dilly"). Claim 7 stands rejected under § 103(a) as obvious over Kashiwagi; Takabe; Wobschall; and U.S. Patent No. 4,678,872 ("Gutman"). Claim 8 stands rejected under § 103(a) as obvious over Kashiwagi; Takabe; Wobschall; Gutman; and U.S. Patent No. 5,414,231 ("Sato"). Claims 9 and 10 stand rejected under § 103(a) as obvious over Kashiwagi; Takabe; Wobschall; and U.S. Patent No. 5,350,889 ("Lauritsen").

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<sup>2</sup>A copy of a translation is attached; we will refer to it by page number.

## OPINION

At the outset, we recall that claims that are not argued separately stand or fall together. *In re Kaslow*, 707 F.2d 1366, 1376, 217 USPQ 1089, 1096 (Fed. Cir. 1983) (citing *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979)). When the patentability of a dependent claim is not argued separately, in particular, the claim stands or falls with the claim from which it depends. *In re King*, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986) (citing *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983); *In re Burckel*, 592 F.2d 1175, 1178-79, 201 USPQ 67, 70 (CCPA 1979)). Furthermore, "[m]erely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable." 37 C.F.R. § 1.192(c)(7).

Here, the appellant stipulates, "independent claim 1 and dependent claims 3 through 10 stand or fall together. . . ." (Appeal Br. at 5-6.) We select claim 1 as representative of the claims in the group. With this representation in mind, rather than reiterate the positions of the examiner or the appellant *in toto*, we address the following points of contention therebetween:

- proximity switch
- one-shot timer.

#### A. PROXIMITY SWITCH

The examiner finds, "Takabe clearly discloses [0003] that prior art switch assemblies could comprise a switch that can be illuminated when operation of said sensor switch is detected or foreseeing in advanced with a proximity." (Examiner's Answer at 7.) The appellant argues, "the Takabe et al. reference teaches a series combination of proximity sensors with a logic unit having a control algorithm that considers switch status indications and conditions of adjacent switch groupings. . . ." (Appeal Br. at 7-8.)

In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the representative claim to determine its scope. Second, we determine whether the construed claim would have been obvious.

#### 1. Claim Construction

"Analysis begins with a key legal question -- *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). "A transitional term such as 'comprising' or . . . 'which comprises,' does not exclude additional unrecited elements, or steps. . . ." *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1271, 229 USPQ 805, 812 (Fed. Cir. 1986).

Here, claim 1 recites in pertinent part the following limitations: "[a] switch assembly for a vehicle comprising . . . a proximity sensor for actuating said light in response to detecting an object in proximity to said switch. . . ." According to the limitations, detecting the proximity of an object is a prerequisite for illumination. Because the independent claim uses the transitional term "comprising," however, it does not exclude additional prerequisites.

## 2. Obviousness Determination

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious. The question of obviousness is "based on underlying factual determinations including . . . what th[e] prior art teaches explicitly and inherently. . . ." *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *In re Dembiczak*, 175 F.3d 994, 998, 50 USPQ 1614, 1616 (Fed. Cir. 1999); *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995)).

Here, we find that Takabe teaches that detecting the proximity of an object is a prerequisite for illumination. Specifically, "the switch lighting system of the vehicle . . . turn[s] on the pilot lamp which illuminates a switch, when the preperception detection of the operation of the switch . . . is carried out in advance with a proximity sensor."

Takabe Translation, ¶ 0003. For the aforementioned reason, any other prerequisites for illumination that may be mentioned in the reference are not excluded by the open-ended claim.

Even if the claim was not open-ended, "[w]hat appellant[] overlook[s] is that it is not necessary that the inventions of the references be physically combinable to render obvious the invention under review." *In re Sneed*, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. United States*, 702 F.2d 1005, 1013, 217 USPQ 193, 200 (Fed. Cir. 1983); *In re Andersen*, 391 F.2d 953, 958, 157 USPQ 277, 281 (CCPA 1968)). See also *In re Nievelt*, 482 F.2d 965, 968, 179 USPQ 224, 226 (CCPA 1972) ("Combining the teachings of references does not involve an ability to combine their specific structures."). The test for obviousness is not whether the features of a reference may be bodily incorporated into the structure of another reference but what the combined teachings of those references would have suggested to one of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

Here, combining teachings of Kashiwagi and Takabe does not require bodily incorporating the entire logic unit and control algorithm of the latter into the structure of the former. Takabe is relied on only to disclose the use of a proximity sensor to actuate

illumination. The appellant's argument overlooks "the relevant combined teachings of the references. . . ." *Andersen*, 391 F.2d at 958, 157 USPQ at 281.

#### B . ONE-SHOT TIMER

The examiner finds, "Wobschall teaches (page 255) that one-shot multivibrators could also be implemented using positive-edge-triggered pulses (Figure 16-2)." (Examiner's Answer at 8.) The appellant argues, "application of the teachings of the Wobschall reference to the present invention would result in a light that is constantly illuminated and only extinguished upon receipt of a signal from the proximity sensor." (Appeal Br. at 8.)

#### 1. Claim Construction

"[T]he Board must give claims their broadest reasonable construction. . . ." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000). "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)).

Here, claim 1 recites in pertinent part the following limitations: "a one-shot timer circuit for receiving an actuation signal . . . and for actuating said light for a predetermined period of time in response to said actuation signal." Giving the representative claim its broadest, reasonable construction, the limitations require that a one-shot circuit actuate a light for a period of time in response to a triggering signal.

## 2. Obviousness Determination

"A *prima facie* case of obviousness is established when the teachings from the prior art itself would . . . have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). "[T]he test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1025, 226 USPQ 881, 886-87 (Fed. Cir. 1985) (quoting *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)).

Here, we find that Kashiwagi teaches actuating a light for a period of time in response to a triggering signal. Specifically, "turning on of the pressure switch 50 or 60 causes an illumination lamp 70 incorporated in the switch unit 21 to be lighted up for a prescribed time period (15 seconds, for instance), and it is turned off automatically thereafter." Col. 4, ll. 45-49. We further find that Takabe also teaches actuating a light for a period of time in response to a triggering signal. Specifically, "when one infrared sensors 5 is turned on [it], the pilot lamp 4 in the corresponding only lighting zone turns on **only the fixed time by which a timer setup was carried out.** . . ." Takabe Translation, ¶ 0028 (emphasis added).

For its part, Wobschall uses a one-shot circuit to generate an actuation signal for a period of time in response to a triggering signal. More specifically, Figure 16-2 shows "[o]ne-shot multivibrator[s]" that generate an actuation signal, Q, for a period of time, T, in response to an "input trigger pulse reach[ing] an upper threshold level. . . ." P. 255. The reference adds that such multivibrators "feature high speed and direct compatibility with digital systems." *Id.* Because Kashiwagi or Takabe teach actuating a light for a period of time in response to a triggering signal, and Wobschall discloses the desirability of using a one-shot multivibrator to generate an actuation signal for a period of time in response to a triggering signal, we are persuaded that the combined teachings of the references would have suggested using a one-shot circuit to actuate a light for a period of time in response to a triggering signal. Therefore, we affirm the obviousness rejection of claim 1 and of claims 3-10, which fall therewith.

#### CONCLUSION

In summary, the rejections of claims 1 and 3-10 under § 103(a) are affirmed. "Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences. . . ." 37 C.F.R. § 1.192(a). Accordingly, our affirmance is based only on the arguments made in the briefs. Any arguments or authorities not included therein are neither before us nor at issue but are considered waived.

No time for taking any action connected with this appeal may be extended under  
37 C.F.R. § 1.136(a).

AFFIRMED

KENNETH W. HAIRSTON  
Administrative Patent Judge

LANCE LEONARD BARRY  
Administrative Patent Judge

STUART S. LEVY  
Administrative Patent Judge

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