

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(2) is not binding precedent of the Board.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 OLE K. NILSSEN

Appeal No. 96-1659
Application 08/166,931¹

ON BRIEF

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

JERRY SMITH, Administrative Patent Judge.

¹ Application for patent filed December 15, 1993. According to appellant, this application is a continuation-in-part of Application 08/004,598, filed January 14, 1993; which is a continuation-in-part of Application 07/860,234, filed March 27, 1992, now Patent No. 5,210,788, issued May 11, 1993; which is a continuation of Application 07/627,189, filed December 13, 1990; which is a continuation-in-part of Application 07/562,897, filed August 6, 1990, now Patent No. 5,068,890, issued November 26, 1991; which is continuation-in-part of Application 07/397,266, filed August 23, 1989, now Patent No. 5,070,522, issued December 3, 1991; which is a continuation-in-part of Application 07/136,505 filed December 23, 1987, now Patent No. 4,866,757, issued September 12, 1989; which is a continuation of Application 06/921,381, filed October 22, 1986.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 35-68, which constitute all the claims in the application.

The disclosed invention pertains to an arrangement for interconnecting a plurality of smoke alarms within a building to each other and to an external source of electrical power.

Representative claim 35 is reproduced as follows:

35. An arrangement comprising:

a building occupied, at least at times, by human beings; the building having a first set of electrical terminals;

a source of electrical power located outside of the building; the source having a second set of electrical terminals;

a first set of conductors connected between the first set of electrical terminals and the second set of electrical terminals;

a master smoke alarm located within the building; the master smoke alarm having a set of master power input terminals connected with the second set of electrical terminals by way of a second set of conductors; the master smoke alarm being further characterized; (i) by having a set of master input/output terminals; (ii) by including a master siren operative to sound an alarm in the presence of smoke; and (iii) by including a master battery;

plural slave smoke alarms located within the building; each slave smoke alarm being further characterized: (i) by having a set of slave input/output terminals; (ii) by

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including a slave siren operative to sound an alarm in the presence of smoke; and (iii) by not including a battery; and

a third set of conductors connecting each set of slave input/output terminals with each other set of slave input/output terminals as well as with the set of master input/output terminals.

The examiner relies on the following references:

Kabat et al. (Kabat) 1984	4,429,299	Jan. 31,
Iwata 1984	4,468,655	Aug. 28,
Ferguson et al. (Ferguson) 1987	4,673,920	June 16,
Watkins 1988	4,731,810	Mar. 15,

Claims 35-49, 53 and 55-68 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the invention. Claims 35-41, 44-46 and 49-55 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Ferguson in view of Watkins. Claims 42, 43, 47 and 48 stand rejected under 35 U.S.C. § 103 as unpatentable over Ferguson and Watkins in view of Iwata. Finally, claims 56-68 stand rejected under 35

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U.S.C. § 103 as unpatentable over Ferguson and Watkins in view of Kabat.

Rather than repeat the arguments of appellant or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner, the arguments in support of the rejections and the evidence of obviousness relied upon by the examiner as support for the obviousness rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that claims 35-49, 53 and 55-68 particularly point out the invention in a manner which complies with 35 U.S.C. § 112. We are also of the view that the collective evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the

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obviousness of the invention as set forth in claims 35-49, 51 and 55-68. We reach the opposite conclusion with respect to claims 50 and 52-54. Accordingly, we affirm-in-part.

We consider first the rejection of claims 35-49, 53 and 55-68 under the second paragraph of 35 U.S.C. § 112. The examiner's rejection states the following:

In each of these claims, the language "characterized" is indefinite and should be changed to appropriate claim language such as -comprising- [answer, page 3].

Appellant argues that the criticized term "is particularly appropos" [brief, page 3].

The general rule is that a claim must set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the disclosure as it would be by the artisan. In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed in light of the specification. Seattle Box Co. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984).

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We are not aware of any per se rule as proposed by the examiner that use of the term "characterized" in a claim automatically renders the claim indefinite. The examiner seems to suggest that the word "comprising" must be used instead of the word "characterized." The examiner has not presented any rationale as to why appellant's selection of the word "characterized" renders the claimed invention indefinite. We agree with appellant that the artisan having considered the specification of this application would have no difficulty ascertaining the scope of the invention recited in claims 35-49, 53 and 55-68. Therefore, the rejection of these claims under the second paragraph of 35 U.S.C. § 112 is not sustained.

We now consider the rejection of claims 35-68 under 35 U.S.C. § 103 as unpatentable over various combinations of Ferguson, Watkins, Iwata and Kabat. As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an examiner is under a burden to make out a prima facie case of

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obviousness. If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

1. The rejection of claims 35-41, 44-46 and 49-55 on Ferguson in view of Watkins.

With respect to independent claim 35, the examiner has cited Ferguson for its teaching of a plurality of interconnected remote smoke alarms. Watkins is cited to ostensibly show that plural remote alarm stations can be powered by either conventional A.C. power lines or by conventional telephone lines [answer, page 4]. Appellant's only argument is that the recitation in claim 35 that the master smoke alarm has a battery whereas the slave smoke alarms do not have a battery is not suggested by either

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Ferguson or Watkins. The examiner responds that the artisan would recognize that "power is derived from the existing power line thereby eliminating the need for an independent power supply such as an electric battery" [answer, page 5].

The examiner's bald statements fail to establish a prima facie case for the obviousness of claim 35. As pointed out by appellant, claim 35 recites a specific relationship between the master smoke alarm and the slave smoke alarms as to which has the battery and which does not. The examiner never addresses this relationship. The examiner observes that any alarm in Ferguson or Watkins can be the master alarm and any of the others can be slave alarms [answer, page 5]. It is this very point, however, which teaches away from the claimed invention. Since any alarm in the applied prior art can be the master or the slave, the artisan would make them all alike. That is, either all the smoke alarms would have a battery or all the smoke alarms would not have a battery. The examiner has provided no evidence of obviousness and no analysis which supports the obviousness of

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the battery recitations in independent claim 35. Although we cannot say whether there is better prior art than the prior art applied by the examiner, we can say that the applied prior art in combination with the examiner's analysis fails to establish a prima facie case of obviousness against claim 35. Therefore, we cannot sustain the rejection of claim 35 under 35 U.S.C. § 103 as proposed by the examiner. Since claims 36-41, 44-46 and 49 depend from claim 35, we also do not sustain the rejection of these claims.

With respect to independent claim 50, the examiner essentially cites Ferguson and Watkins for the same reasons discussed above with respect to claim 35. With respect to the claimed voltage conditioning sub-system, the examiner observes that "[t]he recited voltage conditioner means reads on Watkins PWM, col. 6, lines 1-65" [answer, page 6]. Appellant's brief has absolutely no arguments specifically directed to the nonobviousness of claim 50.

Although we concluded that the examiner had failed to make a prima facie case of obviousness with respect to claim 35, independent claim 50 has no recitations regarding a master smoke alarm and slave smoke alarms and no recitation regarding

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batteries as was present in claim 35. Claim 50 recites a voltage conditioning sub-system connected to the building electrical terminals. In our view, the PWM circuit of Watkins does constitute a voltage conditioning sub-system within the broad meaning of that term. Therefore, the examiner has properly established a prima facie case of obviousness with respect to independent claim 50. As noted above, an applicant is required to provide a persuasive response to a properly made prima facie case of obviousness. Since appellant has provided no response to the rejection of claim 50, we sustain the rejection of claim 50 under 35 U.S.C. § 103. Claims 52 and 54 depend from claim 50 and have also not been argued by appellant in the brief. Therefore, these claims fall with claim 50 from which they depend.

With respect to dependent claim 51, appellant argues that the recitation of a resistor drawing more current during periods when no alarm is being emitted than do all the smoke alarms in combination is not described or suggested by Ferguson and/or Watkins [brief, page 5]. The examiner responds that claim 51 "reads on a conventional end of line resistor (EOL) employed in conventional loop monitoring of

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plural alarm stations or alarm elements" [answer, page 6].
The examiner has not cited any other evidence in support of this apparent "official notice" of the conventionality of an EOL resistor and the manner in which such conventionality would have rendered the invention of claim 51 obvious.

The examiner is not permitted to dispense with the showing of evidence in support of the examiner's assertions of obviousness. We are not inclined to support contested findings of fact made by the examiner which are not supported by any evidence in the record. Therefore, we do not sustain the rejection of claim 51.

With respect to dependent claim 53, appellant argues that the recitation of a person touching a certain conductor not being subjected to a hazardous electric shock is not described or suggested by Ferguson and/or Watkins [brief, page 5]. The examiner responds that Claim 53 "reads on the conventional ground fault interrupter (GFI) and would have been obvious to employ a GFI at any location throughout the house where potential electrical shocks may be present such as bathrooms" [answer, page 6]. Although the examiner has cited no evidence in support of his position, we agree with the

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examiner that the invention as broadly recited in claim 53 would have been obvious to the artisan in view of the applied prior art and the level of skill in this art.

The artisan would have known that all electrical wiring within a building includes a ground conductor or a conductor at ground potential. This ground conductor represents the "certain conductor" of claim 53. Claim 53 recites that a person who is grounded would not be shocked by touching this certain conductor. Since the certain conductor is at ground level and since the person is grounded as recited in the claim, there would be no hazardous shock when these two ground level items contact each other. Therefore, we sustain the rejection of claim 53 under 35 U.S.C. § 103.

With respect to dependent claim 55, appellant argues that the recitation of the source of electrical power including a pair of telephone lines from a public telephone company is not described or suggested by Ferguson and/or Watkins [brief, page 5]. The examiner responds that Watkins would have suggested the obviousness of employing conventional

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A.C. power lines or ordinary telephone lines for powering loads such as smoke alarms [answer, page 9].

The examiner's assertion that Watkins suggests the obviousness of powering loads from ordinary telephone lines is baseless. The telephone lines in Watkins only power the telephone lines and nothing else. Watkins teaches that the phone lines of a neighboring home can be accessed when the phone lines at a given home have been cut by an intruder. The phone lines in Watkins, however, are powered only by the telephone company. The signal that telephone lines have been cut in Watkins is transmitted between homes using conventional A.C. electric wiring. Watkins never suggests that the power available on the conventional telephone lines could or should be used to power something other than the telephone lines. Since claim 55 recites that building smoke alarms must be powered by conventional telephone lines, and since Watkins does not suggest this feature for reasons just discussed, we do not sustain the rejection of claim 55 under 35 U.S.C. § 103.

In summary, the rejection of claims 35-41, 44-46 and

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49-55 as being unpatentable over the teachings of Ferguson and Watkins is sustained with respect to claims 50 and 52-54 but is not sustained with respect to claims 35-41, 44-46, 49, 51 and 55.

2. The rejection of claims 42, 43, 47 and 48 on Ferguson and Watkins in view of Iwata.

Each of these claims depends from independent claim 35 which was discussed previously. We did not sustain the rejection of claim 35. Since the additional citation of Iwata does not overcome the deficiencies noted above in the rejection of claim 35, we also do not sustain the rejection of these claims under 35 U.S.C. § 103.

3. The rejection of claims 56-68 on Ferguson and Watkins in view of Kabat.

With respect to independent claims 56 and 67, the examiner cites Ferguson and Watkins in the manner discussed above. Kabat is cited as showing an interconnection of plural smart loads with smart voltage conditioners. The examiner relies on Kabat to teach the interfacing of alarm units in Ferguson and for the recited resistive load in claims 56 and

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67 [answer, page 7]. Appellant argues that the claimed details of operation of the smart voltage conditioner are not described or suggested by Ferguson, Watkins and/or Kabat [brief, page 6]. We agree with appellant.

We are unable to verify the examiner's assertion that the transmission and reception of data in Kabat satisfies the condition of the smart voltage conditioner recited in claims 56 and 67. There is nothing in Kabat to suggest the obviousness of maintaining a conditioned voltage of a given magnitude across the pair of distribution conductors except when a resistive load is connected directly across the pair of distribution conductors. The examiner's assertion that Kabat teaches this condition is pure speculation which is not supported by the evidence of record in this case. Once again, we cannot say whether there is better prior art than that applied by the examiner. All we can determine is that the prior art applied by the examiner does not provide the factual basis to support the rejection proposed by the examiner. Therefore, we do not sustain the rejection of independent claims 56 and 67 under 35 U.S.C. § 103. Since claims 57-66

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and 68 depend from one of these independent claims, we also do not sustain the rejection of these dependent claims.

In conclusion, the rejection of claims 35-49, 53 and 55-68 under the second paragraph of 35 U.S.C. § 112 is not sustained. The rejection of claims 35-68 under 35 U.S.C. § 103 is sustained with respect to claims 50 and 52-54 but is not sustained with respect to claims 35-49, 51 and 55-68. Therefore, the decision of the examiner rejecting claims 35-68 is affirmed-in-part.

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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

	ERROL A. KRASS)	
	Administrative Patent Judge)	
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	JERRY SMITH)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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	JAMES T. CARMICHAEL)	
	Administrative Patent Judge)	

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Ole K. Nilssen
408 Caesar Drive
Barrington, IL 60010