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### Datasheet for the decision of 27 November 2019

Case Number: T 0975/15 - 3.5.02

Application Number: 08705531.5

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G08B13/14, A47F7/024, IPC:

E05B45/00, E05B73/00, G09F3/14,

H02G11/00

Language of the proceedings: EN

### Title of invention:

Security System with Product Power Capability

### Applicant:

InVue Security Products, Inc.

### Relevant legal provisions:

EPC Art. 54, 56, 84, 123(2), 111(1)

### Keyword:

Novelty - main request (yes) Inventive step - main request (no) - aux. request 3 (over D1 Claims - clarity - aux. request 3 (yes) Amendments - allowable - aux. request 3 (yes) Appeal decision - remittal to first instance (yes)



# Beschwerdekammern Boards of Appeal Chambres de recours

Boards of Appeal of the European Patent Office Richard-Reitzner-Allee 8 85540 Haar GERMANY Tel. +49 (0)89 2399-0 Fax +49 (0)89 2399-4465

Case Number: T 0975/15 - 3.5.02

DECISION
of Technical Board of Appeal 3.5.02
of 27 November 2019

Appellant: InVue Security Products, Inc.

(Applicant) 9201 Baybrook Lane

Charlotte, NC 28277 (US)

Representative: Grosse, Felix Christopher

Grosse - Schumacher - Knauer - von Hirschhausen

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 23 December 2014 refusing European patent application No. 08705531.5 pursuant to Article 97(2) EPC.

### Composition of the Board:

Chairman R. Lord Members: G. Flyng

W. Ungler

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### Summary of Facts and Submissions

- I. The applicant's appeal contests the examining division's decision to refuse the European patent application 08 705 531.5, which was published in the international phase as WO2008/088699 A2.
- II. In the contested decision, the examining division considered the applicant's main request and auxiliary requests 1 to 7.

The examining division decided not to admit the main request to the procedure pursuant to Rule 137(3) EPC. Nevertheless, they set out in section 10.1.1 the reasons why claim 1 of the main request was considered to lack novelty in the sense of Article 54(2) EPC from document D1: US 2005/001485 A1 and treated the applicant's arguments in detail in section 10.1.2.

In section 10.1.2, part vi) they commented on paragraph [0033] of D1 according to which (emphasis as used by the examining division):

"If the alarm circuit detects that the security circuit is open, i.e., cut, indicating, for example, that the device 3 has been unplugged OR the cable 7 has been cut, it triggers an alarm condition and activates a visible or audible alarm."

They held that the final feature of main request claim 1 was disclosed in D1 because:

- the skilled person received from this the explicit indication that any unplugging of the device, regardless of the origin of this unplugging should be a detectable event by the alarm system;

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- an unplugging of the device 3 can occur by the removal, detachment or severance of any of the conductors connected in order to provide power to it; and
- the device is connected to the power source, among others by conductor 48.

Furthermore, they held that even if document D1 did not provide such explicit indication in this sense, it would be obvious to the skill[ed] person, considering the teaching of D1, to extend the triggering of the alarm to any disruptive electrical event taking place on the powering line of device 3, as the aim of the system was to detect theft implying such anomalies. They concluded that even in this case, the subjectmatter of [main request] claim 1 would have been considered as not involving an inventive step.

Finally, the examining division held that none of the auxiliary requests 1 to 7 met the requirements for inventive step.

- III. With the statement setting out the grounds of appeal the appellant (applicant) requested that the decision under appeal be set aside and that a patent be granted on the basis of their main request, or alternatively on the basis of one of their auxiliary requests 1, 1A, 1B, 1C, 2, 3, 4, 5, 6 and 7 in that order. Auxiliary requests 1A, 1B and 1C were filed with the grounds of appeal. The other requests are those considered in the contested decision.
- IV. The Board summoned the appellant to oral proceedings, setting out their preliminary observations in a communication pursuant to Article 15(1) RPBA.

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- V. The appellant replied with a letter dated 28 October 2019 and filed amended claims according to a new main request and first to sixth auxiliary requests.
- VI. Oral Proceedings were held on 27 November 2019. The appellant requested finally that the decision under appeal be set aside and that a patent be granted on the basis of the main request filed with letter dated 28 October 2019, or on the basis of the third auxiliary request filed during the oral proceedings of 27 November 2019, or on the basis of one of the fourth to sixth auxiliary requests filed with letter dated 28 October 2019.
- VII. Claim 1 of the main request reads as follows:
  - "A security system (1) for displaying and protecting a displayed product (7) comprising:
  - a sensor (5) removably seated on the display module (3) and connected to the displayed product (7);
  - a remote source of electric power (57);
  - a display module (3);
  - a first power cord (59) electrically connecting the display module (3) to the source of electric power (57);
  - a second power cord (77) electrically and mechanically connecting the display module (3) to the sensor (5); a third power cord (89) electrically and mechanically connecting the sensor (5) to the displayed product (7); wherein said first, second and third power cords (59, 77, 89) are providing an electrical path extending from the remote source of electric power (57) through the display module (3) to the displayed product (7); and an alarm circuit (39) contained in the display module (3) and providing a sense loop through the second power cord (77), and an audible alarm (53) for sounding an

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alarm upon the integrity of said second power cord (77) being compromised;

characterized in that

the alarm circuit (39) further provides a sense loop through the third power cord (89), and the audible alarm (53) sounds an alarm upon the integrity of said third power cord (89) being compromised."

## VIII. Claim 1 of the **third auxiliary request** reads as follows:

"A security system (1) for displaying and protecting a single displayed product (7) comprising:

an individual display module (3) adapted to be mounted on a support (9);

- a sensor (5) removably seated on the individual display module (3) and connected to the single displayed product (7);
- a remote source of electric power (57);
- a first power cord (59) electrically connecting the individual display module (3) to the source of electric power (57);
- a second power cord (77) electrically and mechanically connecting the individual display module (3) to the sensor (5);
- a third power cord (89) electrically and mechanically connecting the sensor (5) to the single displayed product (7),

wherein said first, second and third power cords (59, 77, 89) provide an electrical path extending from the remote source of electric power (57) through the individual display module (3) to the single displayed product (7) and

wherein an alarm circuit (39) is contained in the individual display module (3) and provides a sense loop through the second power cord (77) and an audible alarm

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(53) for sounding an alarm upon the integrity of said second power cord (77) being compromised; characterized in that:

the alarm circuit (39) further provides a sense loop through the third power cord (89) and the audible alarm (53) sounds an alarm upon the integrity of said third power cord (89) being compromised;

the sensor (5) includes an internal plunger switch (79) or pressure switch configured to activate the alarm system when sensor (5) is secured to the single displayed product (7); and

a further plunger switch (16) or pressure switch is mounted within the individual display module (3) and configured to activate the alarm system when the individual display module (3) is mounted on the support (9),

wherein the alarm circuit (39) is configured to sound an alarm upon removal of the single displayed product (7) from the sensor (5) or upon removal of the individual display module (3) from the support (9), namely upon actuation of the internal plunger switch (79) or pressure switch or upon actuation of the further plunger switch (16) or pressure switch."

IX. The appellant argues in essence that their final requests should be admitted into the proceedings and that the claimed subject-matter is novel and inventive over the cited prior art. Their detailed arguments are treated as necessary in the reasons for the decision which follow.

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### Reasons for the Decision

### 1. Main Request, Admission, Articles 12 (4) and 13 RPBA

The Board exercised their discretion to admit the main request filed with the letter dated 28 October 2019 into the proceedings.

In exercising their discretion the Board took account of the appellant's submissions in II.1.1 of the grounds of appeal regarding the examining division's decision not to admit the former main request to the procedure pursuant to Rule 137(3) EPC, and of the fact that the examining division anyway gave their reasoning regarding that request in the contested decision. Furthermore, the Board considered the amendments made according to the main request filed with the letter dated 28 October 2019 to be a reasonable reaction to the observations they had made in the communication pursuant to Article 15(1) RPBA.

### 2. Main Request, Novelty, Article 54 EPC

In section II.1.3 of the grounds of appeal the appellant argued on the basis that document D1 did not disclose the claimed stand-alone security system having an individual display module for protecting a single product. However claim 1 of the main request does not specify that the security system is a <a href="stand-alone">stand-alone</a> one, or that it has an <a href="individual">individual</a> display module, or that it is for protecting a <a href="single">single</a> product. Hence, these arguments are ill-founded.

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- 2.2 In section II.1.4 of the grounds of appeal the appellant argued on the basis that the Examining Division's rationale for equating the base module 17 of D1 as being part of a display module was misplaced. Having considered these arguments the Board concur with the examining division that taken together the display cover plate 11, molded stalk base 29 and power supply base module 17 of document D1 do fall within the definition of the "display module" as set out in claim 1 of the main request (see reasons for the decision, section 10.1.2, parts i) to iv)). The features of claim 1 of the main request do not preclude the possibility that the display module contains a plurality of alarm circuits for connection to a respective plurality of displayed products. Hence, claim 1 of the main request encompasses the arrangement of document D1 with a plurality of power supply base modules each having a plurality of alarm circuits that can be connected via a plurality of cables 7 (i.e. second power cords) to a plurality of security modules 5 (i.e. sensors) that are removably seated on a plurality of stalk bases 29 of the display module.
- 2.3 The Board does however find the appellant's argument in section II.1.5 of the grounds of appeal persuasive in so far as that document D1 does not disclose the features of main request claim 1 according to which the alarm circuit "further provides a sense loop through the third power cord" and the audible alarm "sounds an alarm upon the integrity of said third power cord being compromised".

Document D1 gives a detailed description of the cable 48 connecting the device security module (i.e. sensor) 5 to the protected device 3 (see figure 7 and associated description) and there is no disclosure of a

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sense loop. This is in contrast to the cable 7 connecting the power supply base module 17 to the device security module 5, which has a sense loop connected to the pins 5 and 6 of connector 37 (see figure 6 and paragraph [0036]. Absent a sense loop in the cable 48, or any other provision with similar functionality, the alarm circuit of document D1 would be unable to detect the integrity of the cable 48 being compromised.

Furthermore, the Board is not convinced by the division's finding that an alarm in the event of the cable 48 being compromised is disclosed in paragraph [0033] of document D1. Given the absence of a sensing loop in the cable 48 connected directly to the device 3, the reference to "indicating ... that the device 3 has been unplugged" cannot be understood in the sense that the cable 48 has been compromised. It could equally be understood in the more general sense that the device 3 has been unplugged by unplugging the cable 7 from the device security module 5.

- 2.4 Hence, the Board considers that the features according to which the alarm circuit "further provides a sense loop through the third power cord" and "the audible alarm ... sounds an alarm upon the integrity of said third power cord being compromised" render claim 1 of the main request novel over document D1, Article 54 EPC.
- 3. Main Request, Inventive Step, Article 56 EPC
- 3.1 The Board concurs with the examining division's finding that starting from document D1 and seeking to improve theft detection it would be obvious to provide the (third) cable 48 with a sensing loop similar to that

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already provided in the (second) cable 7 and to thus give an alarm when the integrity of the cable 48 is compromised (eg. by cutting it), or when the cable 48 is unplugged from the protected device.

3.2 The appellant argued that in document D1 the tamper switches 67 associated with the bolt 33/85 connecting the security module (sensor) 5 to the tripod mount of the camera 3 were connected to a sense loop and caused the alarm to sound if the screw was loosened. The cable 48 just had to provide power to the camera, and so could be a standard cable with a standard connector on each end.

As the camera 3 could not be removed from the security module 5 without loosening the bolt 33/85 and setting off the alarm, there was no incentive for the skilled person to provide an additional sense loop in the cable 48 (third power cord) as claimed. This would be a redundant system. Furthermore, it would prevent the use of a standard cable and would require a plug with two more pins and modifications to the circuit board in the security module (shown schematically in figure 6).

Furthermore, by relying on the tamper switches 67 and not having a sense loop in the cable 48 the security module could be kept smaller than would otherwise be the case.

3.3 The Board did not find these arguments convincing.

Redundant "belt and braces" arrangements are commonly used in alarm systems to improve security in the event of one of the two being compromised. Even in the application itself, the sense loop in the third power cord 89 and the plunger switch 79 between the sensor 5 and the displayed product provided such redundancy.

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Furthermore, the Board considered that the need to provide additional pins in the plugs of cable 51 of D1 and the need to adapt the PCB would not provide any significant hindrance to the skilled person. Indeed, the plug 49 of D1 was already provided with additional pins for connection to the calibrating component 63 (figures 3, 4, 7, 8) and in the figure 8 arrangement the cable (61) already included additional cores for that purpose.

As to the arguments regarding the size of the security module (i.e. sensor), the Board is not convinced that providing a sense loop in the cable 48 would make the security module any bigger.

3.4 Thus, having considered the appellant's arguments the Board remains of the view that the subject-matter of claim 1 of the main request is obvious in view of the disclosure of document D1 and the skilled person's common general knowledge.

### 4. Third Auxiliary Request, Admission

The Board exercised their discretion to admit the third auxiliary request filed during the oral proceedings. It corresponds to a large extent to auxiliary request 1 as filed during the first-instance procedure, but with amendments that are a reasonable reaction to the observations the Board made in the communication pursuant to Article 15(1) RPBA.

### 5. Third Auxiliary Request, Articles 84 and 123(2) EPC

In view of the amendments made in reaction to the objections set out in the communication pursuant to Article 15(1) RPBA and raised in the oral proceedings,

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the Board considers that claim 1 of the third auxiliary request filed in the oral proceedings meets the requirements of Articles 123(2) and 84 EPC.

In particular, the amendments have a basis in the following disclosures of the application as published:

- Page 1, lines 11 to 13;
- Page 7, lines 7 to 10;
- Page 8, lines 10 to 14;
- Page 11, lines 1 to 3; and
- Page 11, lines 28 to 32.
- 6. Third Auxiliary Request, Novelty and Inventive Step
- 6.1 In claim 1 of the third auxiliary request the security system is specified as being for displaying and protecting a single displayed product.

It comprises an <u>individual</u> display module and a sensor removably seated on the <u>individual</u> display module and connected to the single displayed product.

In addition, the sensor of the security system includes an <u>internal plunger switch or pressure switch</u> configured to activate the alarm system when sensor is secured to the single displayed product.

Furthermore, a <u>further plunger switch or pressure</u>
<u>switch</u> is mounted within the individual display module and configured to activate the alarm system when the individual display module is mounted on the support.

The alarm circuit sounds an alarm upon removal of the single displayed product from the sensor or upon removal of the individual display module from the support, namely upon actuation of the internal plunger/

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pressure switch or of the further plunger/pressure switch.

6.2 None of the features set out above is known from document D1 (Article 54 EPC) and the Board does not consider them to be rendered obvious by document D1 (Article 56 EPC). Hence, the subject-matter of claim 1 of the third auxiliary request involves an inventive step over document D1 alone.

### 7. Third Auxiliary Request, Remittal, Article 111 (1) EPC

7.1 In the contested decision document D1 was the only prior art document discussed for novelty and inventive step. As the subject-matter of auxiliary request 3 has apparently not been examined for novelty and inventive step in view of the remaining documents cited in the search report the Board considers it appropriate to remit the case to the department of first instance for further prosecution. The appellant has not objected such remittal.

### 8. Fourth to Sixth Auxiliary Requests

In view of the Board's decision on the third auxiliary request they did not take a decision on the admission of the fourth to sixth Auxiliary Requests

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### Order

### For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the examining division for further prosecution.

The Registrar:

The Chairman:



U. Bultmann R. Lord

Decision electronically authenticated