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D E C I S I O N
of 19 March 1997

Case Number: T 0803/93 - 3.4.1

Application Number: 85304219.0

Publication Number: 0169649

IPC: G07G 1/06

Language of the proceedings: EN

Title of invention:
Apparatus and method for reducing theft from a store

Patentee:
BOGASKY, JOHN J.

Opponent:
Sensormatic Electronics Corp.

Headword:
Theft-detection system/BOGASKY

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step - no"

Decisions cited:
G 0004/95

Catchword:
-



Case Number: T 0803/93 - 3.4.1

D E C I S I O N
of the Technical Board of Appeal 3.4.1
of 19 March 1997

Appellant:
(Proprietor of the patent)

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Decision under appeal:

Decision of the Opposition Division of the
European Patent Office posted 2 August 1993
revoking European patent No. 0 169 649 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: G. D. Paterson
Members: R. K. Shukla
Y. J. F. Van Henden

Summary of Facts and Submissions

I. European patent No. 0 169 649 was revoked by a decision of the Opposition Division pursuant to Article 102(1) EPC, on the ground that the patent as granted and as amended according to an auxiliary request did not comply with the requirement of inventive step having regard to the following prior art documents:

E1 FR-A-2 252 069 (= E1' - English translation supplied by the Opponent) and

E2 US-A-3 534 358.

II. The patent Proprietor lodged an appeal against the above decision. As a first ground of appeal the Proprietor contended that a substantial procedural violation had occurred during the oral proceedings before the Opposition Division, because the entire case of the Opponent had been presented by a Mr. Blecker, an American patent attorney who is not entitled under the EPC to represent a party to proceedings before the EPO or otherwise to make oral submissions during oral proceedings.

As a further ground of appeal the Proprietor contended that the patent should be maintained in accordance with the main request filed with the grounds of appeal. The Proprietor further requested that in the event that the main request was not allowable the case should be remitted to an Opposition Division with a new composition for a re-hearing, that the costs incurred by the Proprietor in the oral proceedings before the Opposition Division should be paid by the Opponent, and that the appeal fee should be refunded. Oral proceedings were requested in the event that the Board intended not to allow any of the above requests.

In reply, the Opponent contended inter alia that there had been no substantial procedural violation at the oral proceedings before the Opposition Division, and requested that the appeal be dismissed and the patent be revoked, since claim 1 is not novel over either E1 or E2, and is also not inventive over E1 or E2 taken alone or in combination. Oral proceedings were requested as an auxiliary request.

In a Decision dated 19 July 1995, the Board of Appeal referred the following questions of law to the Enlarged Board of Appeal.

- (1) During oral proceedings before the EPO under Article 116 EPC, and in the context of opposition or opposition appeal proceedings, having regard to the provisions of Article 133 EPC, may a person who is not qualified in accordance with Article 134 EPC to represent parties to proceedings before the EPO, but who is accompanied by a person who is both qualified and authorised to represent a party to the proceedings, make oral submissions on behalf of that party on legal issues which arise in the case?
- (2) During oral proceedings before the EPO under Article 116 EPC, and in the context of opposition or opposition appeal proceedings, having regard to the provisions of Articles 117 and 133 EPC, may a person who is not qualified in accordance with Article 134 EPC to represent parties to proceedings before the EPO, but who is accompanied by a person who is both qualified and authorised to represent a party to the proceedings, make oral submissions on behalf of that party on technical issues which arise in the case otherwise than by giving evidence orally in accordance with the provisions of Article 117(3) EPC?

(3) In relation to each of questions (1) and (2) above taken separately:

(a) If the answer is "yes", can such oral submissions be made on behalf of the party as a matter of right, or can they be made with the permission of and under the discretion of the EPO?

(b) If such oral submissions can only be made under the discretion of the EPC, what criteria should be considered when exercising such discretion?

(c) Do special criteria apply to qualified patent lawyers of countries which are not Contracting States to the EPC?"

These questions were answered in Decision G 4/95 issued on 19 February 1996 as follows:

(1) and (2) During oral proceedings under Article 116 EPC in the context of opposition or opposition appeal proceedings, a person accompanying the professional representative of a party may be allowed to make oral submissions on specific legal or technical issues on behalf of that party, otherwise than under Article 117 EPC, in addition to the complete presentation of the party's case by the professional representative.

(3) (a) Such oral submissions cannot be made as a matter of right, but only with the permission of and under the discretion of the EPO.

- (b) The following main criteria should be considered by the EPO when exercising its discretion to allow the making of oral submissions by an accompanying person in opposition or opposition appeal proceedings:
 - (i) The professional representative should request permission for such oral submissions to be made. The request should state the name and qualifications of the accompanying person, and should specify the subject-matter of the proposed oral submissions.
 - (ii) The request should be made sufficiently in advance of the oral proceedings so that all opposing parties are able properly to prepare themselves in relation to the proposed oral submissions.
 - (iii) A request which is made shortly before or at the oral proceedings should in the absence of exceptional circumstances be refused, unless each opposing party agrees to the making of the oral submissions requested.
 - (iv) The EPO should be satisfied that oral submissions by an accompanying person are made under the continuing responsibility and control of the professional representative.
- (c) No special criteria apply to the making of oral submissions by qualified patent lawyers of countries which are not Contracting States to the EPC.

III. Following the above Decision of the Enlarged Board of Appeal, the Board issued a communication which informed the parties of its provisional view that the hearing by the Opposition Division of oral submissions from Mr. Blecker had been in accordance with the current practice of the Opposition Division, and that according to Decision G 4/95 such hearing of oral submissions was not contrary to law but was a matter of discretion, so that a substantial procedural violation of such a nature had not occurred as to justify a finding that the decision of the Opposition Division was null and void, and an order for a re-hearing before a different Opposition Division. The Board therefore suggested that the appeal should proceed to the appointment of oral proceedings.

In response, the patent Proprietor contested the above provisional view, but nevertheless waived the request for a re-hearing before the Opposition Division and agreed to the appointment of oral proceedings before the Board in order to expedite the proceedings.

In reply to a request from the Opponent that Mr. Blecker be permitted to make oral submissions at the oral proceedings before the Board, in addition to the complete presentation of the Opponent's case by the professional representative of the Opponent, the Proprietor submitted that such permission should not be granted. The Board issued a communication which informed the parties that provided that any oral submissions by Mr. Blecker would be completely under the control of the Professional representative who would present the complete case of the Opponent, the Board might allow some additional oral submissions by Mr. Blecker at the discretion of the Board.

Prior to the oral proceedings, the patent Proprietor submitted amended sets of claims forming the basis of first and second auxiliary requests, respectively. In response, the Opponent cited inter alia the following further documents

E3 US-A-3 088 544 cited in the European search report, and

E4 US-A-4 097 729

- IV. At the oral proceedings held on 19 March 1997, the patent Proprietor requested as a main request the maintenance of the patent on the basis of the claims forming the previously filed first auxiliary request, and as a first auxiliary request the maintenance of the patent on the basis of the claims forming the basis of the previously filed second auxiliary request.

Claim 1 according to such main request reads as follows:

"A checkout station (200) for reducing theft from a store containing items bearing theft prevention indicators, the checkout station comprising means through which a shopper must pass to leave the store, for dispossessing the shopper from those of the items bearing the theft prevention indicators which the shopper designates for purchase; a secure area (210, 310) into which the shopper enters after the items identified for purchase have been dispossessed from the shopper; a pickup area (255, 355) in which the items identified for purchase are returned to the possession of the shopper; exit means (240), located between the secure area and the pickup area, for permitting the shopper to leave the secure area without the items designated for the purchase, the exit means including sensing means (230) for detecting the

presence of any items bearing theft prevention indicators remaining with the shopper as the shopper leaves the secure area through the exit means, and cashier stations (140), physically separated from the sensing means to a sufficient extent to avoid electrical or magnetic interference with the sensing means, for printing the total cost of the items identified by the shopper for purchase and for receiving payment from the shopper corresponding to the total cost after the items identified by the shopper for purchase have been dispossessed from the shopper characterised in that the store is a supermarket; in that the dispossessing means includes a plurality of separate aisles (85) opening into the same secure area and through which shoppers pass upon entering the checkout station and a corresponding plurality of scanners (82) to compute the total price of the items identified for purchase; in that the arrangement is such that the shopper and the items identified for purchase enter the secure area after the items identified for purchase have been dispossessed from the shopper and that the shopper pays a cashier at the cashier stations for the items purchased before the items identified for purchase and the shopper separately enter the pickup area; in that shoppers having entered the secure area through any one of the plurality of aisles (85) leave the secure area through the exit means (240); and in that egress means (250, 352) are located between the secure area and the pickup area (255, 355) for removing the items identified for purchase from the secure area without the shopper."

In relation to claim 1 above, claim 1 according to the first auxiliary request contains the following additional subject-matter between "in that egress means (250, 352)" and "are located between the secure area..." (see the last statement in claim 1 of the main request):

"including a conveyor system (250) operating between the interior and exterior of the store to carry the items identified for purchase out of the store or including basket doors (350) in an exterior wall of the store"

- V. The patent Proprietor made essentially the following submissions in support of patentability of the subject-matter of claim 1 of the main and first auxiliary requests, respectively.

The invention as claimed is limited to a checkout station for a supermarket and its important features are:

- (i) The provision of dispossessing means including a plurality of separate aisles opening into the same secure area, the term "secure area" meaning a **common** area in which the aisles open and in which the shopper and items enter after the shopper has been dispossessed of the items identified for purchase and before the items and the shopper separately enter the pick-up area.
- (ii) The dispossessing means include a plurality of scanners to compute the total price of the items.

- (iii) The arrangement is such that the shopper pays a cashier at a cashier station before he leaves the secure area through the exit means which is provided with sensing means for detecting the presence of any unauthorised items, and before the items identified for purchase and the shopper separately enter the pick-up area.
- (iv) The cashier stations are physically separated from the sensing means to a sufficient extent to avoid electrical or magnetic interference with the sensing means.

Because of feature (iv), the sensitivity of the sensing means can be set to a relatively high level without running the risk of any false alarm due to electrical or magnetic interference. Also, the overall arrangement as set out in features (i), (ii) and (iii) enables to have less number of checkout stations and exit means (each including sensing means) respectively than the number of aisles, thereby reducing the overall costs, and requires minimal redesign of the existing checkout stations. Thus the invention provides an effective and inexpensive technique to reduce theft from supermarket.

In document E1, it is absolutely essential that there is no contact at all between the person responsible for billing and the shopper, and to this end the billing area (5) where the total price of the items to be purchased is computed is absolutely inaccessible to the shopper. In the checkout station according to the invention, contrary to the above, the scanner for computing the price is provided at the dispossessing means. Moreover, in contrast to feature (iii) above, in the arrangement according to document E1, the shopper pays at a cash register (9) in a receiving area (7) **after it has gone past the theft-detecting system** provided in a passageway (8) between a counter (4) and

the receiving area (7), whereby the payment at the cash register and the checking of the items purchased take place at the same location, which inevitably slows down the process of checking out the shoppers. Furthermore, document E1 discloses the use of a single aisle and checkout system, and even if it were intended to utilise more than one aisle, this would involve repeating the arrangement of items 8 to 11 elsewhere in the store, and it would not be obvious to modify the arrangement in document E1 so that a plurality of aisles open into the same secure area and the items identified for purchase also enter that secure area.

The primary disclosure in document E2 is in connection with libraries, museums, and the like and is concerned mainly with the mechanism of a tag. A very brief mention in the document that the system is applicable to "articles of merchandise" is not sufficient to imply that the system could be used in the context of supermarket with a high throughput of customers. Also, Figure 8 of document E2 is a diagrammatic view of the principle underlying the detection system wherein the authorised objects bypass a detection area. Such a detection system with a bypass are commonly utilised at airports and typically use individual aisles each provided with its own sensor, so that there is no sensor (or security) after a common area into which the individual aisles open.

Thus neither document E1 nor E2 alone or in combination suggests the invention.

VI. In view of the amendments to the subject-matter of claim 1 of the main and auxiliary requests, the objection of lack of novelty was no longer maintained by the Opponent. During the oral proceedings

Mr. Blecker was permitted to make some additional oral submissions, without objection from the patent Proprietor. The Opponent's submissions regarding inventive step can be summarised as follows:

The term "same secure area" in amended claim 1 under consideration is mutually inconsistent in that the area cannot be secure if the items and the shopper enter it (as stated in the claim), since the shopper then would be in a position to place undeclared items on his person into the package containing the items that have been already checked out. The term is therefore to be interpreted broadly in the light of the original disclosure, and is essentially any area where the shopper and the items are separated from each other after the shopper has been dispossessed of the items.

It is evident from references in document E2 to "articles of merchandise", "a conveyor for passage of authorised goods", "purchaser" and "the unit may be employed with a variety of other articles such as by inclusion within the package, wrapping..." that the disclosure in the document is not restricted to libraries, museums, or airport security systems as alleged by the patent Proprietor, but is applicable, for example, to bookshops with a relatively large throughput of customers. Figure 8 is a diagrammatic view of the detection system, according to which a shopper, after he is dispossessed of articles designated for purchase at a checkout desk (17), enters a secure area (i.e. a departure path 18) provided with a detection area (11) for detecting the presence of unauthorised articles and leaves the secure area through an exit means in the detection area to enter a pickup area (the area beyond the detection area where path 10 meets the departure path 18) in which the articles designated for purchase are returned to the shopper. The checkout desk (17) where the shopper is

charged for the dispossessed articles is physically separated from the detection area to a sufficient extent to avoid electrical or magnetic interference with the sensing means in the detection area. The features distinguishing the claimed invention over document E2, i.e. (i) plurality of aisles opening into a secure area and (ii) the provision of scanners at the dispossessing means are well known measures as can be seen from Figure 2 and the corresponding description in the patent in suit, which would be obvious to incorporate in the checkout station of document E2 to cope with the business volume.

Similarly, document E1 is concerned with the problem of preventing theft by a customer in a retail shop and discloses the principle underlying the claimed invention, i.e. of dispossessing the articles identified for purchase from the customer at a checkout counter and then directing the customer along a path through a secure area to a theft detecting system, whereby the customer is able to pickup the articles in a pickup area only after passing through the theft detection system. The use of a plurality of aisles and the location of cashier stations equipped with scanners at the dispossessing means are measures well known in the art (see Figure 2 of the patent in suit), and cannot, therefore, be regarded as involving an inventive step.

With respect to the first auxiliary request, a conveyor system for carrying purchased items from the interior to the exterior of a store is known from document E3, column 1, lines 7 to 12 and 53 to 68, so that the addition of this feature does not involve an inventive step.

VII. At the conclusion of the oral proceedings, the decision was announced that the appeal is dismissed.

Reasons for the Decision

1. The only issue in the present appeal is that of inventive step.
2. *Inventive step*
- 2.1 Meaning of "secure area" in Claim 1

It was submitted by the patent Proprietor that the term "secure area" merely means a common area which is present in any supermarket and in which all the aisles open so that the items identified for purchase and the shoppers having passed through the aisles enter this common area. It was further submitted that the term "secure" merely reflected the normal practice in the art of designating such an area where small articles which are under some form of surveillance are available for purchase, and is not intended to imply any limitation to the subject-matter of the claim.

The above interpretation is consistent with the invention as disclosed in the application as filed. However, the Board would like to emphasise, in line with the broad interpretation attributed by the Opponent (see paragraph VI above), that according to the invention as disclosed, the items identified for purchase and the shopper follow **separate paths** in the common area.

2.2 *Closest prior art*

The Board agrees with the Opponent that although document E2 is primarily concerned with preventing thefts of books, rare manuscripts, classified documents and the like from public libraries, it is certainly not restricted to preventing thefts from the libraries, and

its disclosure is applicable to any self service retail shop selling books or articles in a package or wrapping, which can hold the detection unit described in the document. This follows from statements made throughout the document, i.e. "unauthorised removal of **articles of merchandise...** has not heretofore been satisfactorily prevented" (column 1, line 44); "It is a further object of the present invention to provide theft preventing apparatus for... **articles of merchandise**" (column 1, lines 58 to 60); " the article... which is being **charged to the purchaser**" (column 2, lines 33 to 35); "**purchaser** with the article enters the confined detector path" (column 3, lines 23, 24); **purchaser** then passes along the detector area" (column 3, lines 28, 29); "If the... **purchaser** has secreted on his person" (column 3, lines 29 to 30), and "it will be clear that **the use of the unit 15 is not confined to books, but may be employed with a variety of other articles such as** by inclusion within **the package, wrapping...**" (column 4, lines 1 to 4). Thus, in the Board's view the disclosure in document E2 is relevant and is regarded as coming closest to the claimed invention.

Figure 8 of document E2 shows diagrammatically a detection system which includes a charge out desk (17) where the purchaser presents the articles identified for purchase and where he is charged for the same, a passageway (10) for the purchaser, provided with a detection area (11) for detecting unauthorised articles on the person of the purchaser, and a pickup area where the purchaser collects the articles purchased after leaving the detection area (see, in particular, column 2, line 33 and column 3, lines 29 to 39). The detection area (11) thus can be regarded as an exit provided with sensing means, which separates the passageway (10) from the pick-up area. As the detection

area and the charge out desk are physically separated from each other, it follows that there is no electrical or magnetic interference with the detection system. Moreover, the purchaser pays at the charge out desk before he leaves the detection area and before he collects the articles purchased, the latter following a path (18) which bypasses the detection area. Thus, the purchaser and the articles enter the pick-up area separately.

2.3 *Main Request*

The checkout station as claimed is thus distinguished over the checkout station disclosed in the above document in that

- (i) a plurality of aisles opening into a common area are provided;
- (ii) the dispossessing means include a corresponding plurality of scanners to compute the total price;
- (iii) the arrangement is such that the shoppers and the items identified for purchase enter the common area;
- (iv) exit means for use by the shoppers are provided between the common area and the pickup area, and
- (v) egress means are located between the common area and the pick-up area for removing the items identified for purchase from the common area.

The objective problem addressed by the present invention in relation to the above closest prior art is therefore to provide a checkout station for a supermarket which prevents theft with minimal redesign of the existing checkout stations (see column 4, lines 24 to 29 of the patent).

The formulation of the above objective problem in itself cannot be regarded as contributing to inventive step, since checkout stations for preventing theft in supermarkets are well-known (see, for example, the description of the prior art with reference to Figures 2 to 4 in the patent), and it would be evident that an extensive redesigning of the existing checkout stations to provide an effective theft detection system would be very expensive.

As acknowledged in the patent in suit with respect to Figures 2 to 4 (see also column 2, line 1 to column 3, line 56), and by the patent Proprietor in his submissions during the oral proceedings, known checkout stations for preventing thefts in supermarkets are provided with a plurality of aisles (85) which open into a common area, and each with a cash register (70) including a universal product code scanner, so as to cope with a relatively large throughput of shoppers. Thus the distinguishing features (i) and (ii) above are well-known in the context of a supermarket. Also, having regard to the problem addressed by the patent in suit, i.e. of minimum change in the existing design of the supermarkets, it would be obvious to the skilled person to retain the above features while implementing the theft detection system disclosed in document E2 in a supermarket.

The Board agrees with the patent Proprietor that a common "secure" area such as claimed in the patent in suit (see feature (iii) above) is not derivable from Figure 8 of document E2. However, Figure 8 is merely a diagrammatic view of the detection system and illustrates the principle involved in the theft detection system, so that a skilled person concerned with the above problem would be required to fill in the necessary details for its implementation in a supermarket. In the context of a supermarket having a common area, he would realise that the goods identified for purchase and the shoppers have to follow separate paths as shown in Figure 8 and that this can be accomplished even in a common area simply by directing the goods identified for purchase and the shoppers along different paths. Moreover, he would realise that a detection area (or areas) has to be located somewhere before the shoppers are reunited with the authorised goods, and that a convenient location for the detection area(s) would be the exit door(s) separating the common area and the pickup area shown in the prior art theft detection systems described in the patent in suit.

Furthermore, following the principle of the detection system according to Figure 8 of document E2, the skilled person would realise that the authorised goods have to enter the pick-up area separately from the shoppers, so that some egress means would need to be provided between the common area and the pick-up area for the authorised goods.

Thus, the features (i) to (ii) and (iii) to (v) are no more than obvious measures which would occur to the skilled person when contemplating the use of the principle of the theft detection system disclosed in document E2 in the known supermarkets such as discussed with reference to Figures 2 to 4 in the patent in suit. In the above assessment of inventive step, the

contribution by the features (i) and (ii) on the one hand and by the features (iii) to (v) on the other hand have been assessed separately, because such features are a mere aggregation: the provision of a plurality of aisles and a corresponding plurality of scanners as in features (i) and (ii) enables the system to cope with a relatively large throughput of the shoppers, and is not concerned with the theft preventing aspect of the invention which is addressed by features (iii) to (v). In these circumstances, such a separate assessment is in accordance with the established case law of the boards of appeal.

2.4 For the foregoing reasons, in the Board's judgment the subject-matter of claim 1 of the main request does not involve an inventive step within the meaning of Article 56 EPC.

2.5 *Auxiliary request*

Claim 1 of the auxiliary request is distinguished over the subject-matter of claim 1 of the main request in the provision of a conveyor system or basket doors (see the last sub-paragraph of paragraph IV above). A conveyor system for carrying purchased items from the interior to the exterior of a store is known from document E3 (column 1, lines 7 to 12 and 53 to 68), so that the use of such a conveyor would be an obvious measure in the checkout station according to the subject-matter of claim 1 of the main request. Also, the use of basket doors would be regarded as an obvious alternative to the use of a conveyor system by the skilled person. In the Board's judgment Claim 1 according to the auxiliary request therefore does not involve an inventive step within the meaning of Article 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

M. Beer

G. D. Paterson

