Datasheet for the decision of 24 November 2010

Case Number: T 1454/08 - 3.2.06
Application Number: 99111922.3
Publication Number: 0970911
IPC: B66B 1/46

Language of the proceedings: EN

Title of invention: Individual elevator call changing device

Patentee: Otis Elevator Company

Opponent: INVENTIO AG

Headword: -

Relevant legal provisions: -

Relevant legal provisions (EPC 1973): EPC Art. 111(1)

Keyword: "Subject matter of claim 1 as granted - novel with respect to a single document" "Remittal to opposition division"

Decisions cited: -

Catchword: -
Case Number: T 1454/08 – 3.2.06

DECISION of the Technical Board of Appeal 3.2.06
of 24 November 2010

Appellant: Otis Elevator Company
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Respondent: INVENTIO AG
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 25 May 2008 revoking European patent No. 0970911 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: M. Harrison
W. Sekretaruk
Summary of Facts and Submissions

I. The appellant (patent proprietor) filed an appeal against the opposition division's decision revoking European patent No. 0 970 911 on the basis that the subject matter of claim 1 of the patent was found to lack novelty with respect to:


II. The respondent (opponent) requested dismissal of the appeal.

III. Subsequent to summoning the parties to oral proceedings, the Board issued a communication stating its provisional opinion that certain features of claim 1 appeared indeed to be novel with respect to D1. The Board also stated that if the subject matter of claim 1 was found to be novel over D1, the case might be remitted back to the department of first instance for continued examination of the opposition.

IV. In its letter of 22 October 2010, the respondent provided further arguments to support its request for dismissal of the appeal.

V. During the oral proceedings of 24 November 2010 before the Board, the appellant requested that the decision under appeal be set aside and that the European patent be maintained as granted.

The respondent requested that the appeal be dismissed.
VI. Claim 1 reads as follows, whereby lettering (a) to (m) has been inserted before each feature in accordance with the lettering system used in the decision under appeal:

"1. (a) An elevator system, comprising:

(b) a plurality of elevators (1 - 4) each having a car moveable within a related hoistway for transporting passengers vertically between floors of a building;

(c) a controller (82, 88)

(d) for receiving service messages initiated by passengers requesting elevator service from an origin floor to a destination floor,

(e) for providing hall call commands to said elevators to cause a selected elevator to provide service in response to related ones of said service messages,

(f) and for providing car call commands to said elevators to cause each said selected elevator to stop at a corresponding destination floor;

(g) a plurality of remote control devices (100) to be borne and used by passengers requesting elevator service,

(h) each said remote control device having a transmitter for transmitting electromagnetic call messages for requesting elevator service at the origin
floor to a receiver for transfer to said controller, wherein

(i) each call message transmitted by said device includes a component identifying the particular device that transmitted the message;

(j) and said remote control devices each has a passenger activated means for initiating transmission of a call cancellation message;

(k) said receiver (39-41) for receiving the electromagnetic messages transmitted in proximity therewith and for providing said call messages to said controller;

(l) said call cancellation message including a component identifying the particular device that transmitted the cancellation message;

(m) and said call messages including a component identifying the destination floor designated by said passenger activated means."

VII. The appellant's arguments may be summarised as follows:

The subject matter of claim 1 was novel with respect to D1 in respect of features (b), (i), (j) and (l).

As to feature (b), paragraph [0002] of D1 disclosed a plurality of elevator cars but only in the discussion of prior art and not with respect to the device disclosed in the invention of D1. The references to the invention of D1 were to singular entities of "the
elevator" and "the elevator shaft". In the written submissions the appellant had made reference continually to a singular elevator in D1, never to a plurality of elevators but this had simply not been emphasised in the appeal grounds, since other features were also clearly novel over D1.

As regards features (i) and (l), D1 disclosed a two-way communication, but this did not imply identification of the "particular" device in any message signal; D1 would merely send and receive information to and from any remote on a specific floor. The system essentially allowed the functions conventionally on a fixed operation panel next to a lift opening on each floor to be placed instead on a remote control device, together with some additional door operating functions. This might sometimes result in disadvantages, but did not imply that a message component identifying the particular device should be used to solve such disadvantages. The problems envisaged by the respondent concerning e.g. a door-close command from a different floor were misleading, since the indicators 91 to 95 with transceivers were floor-specific and no disclosure existed that these could react to remote control devices used from a location on a different floor. Also, merely because a telephone was installed on each remote control device was irrelevant to the content of a call or call cancellation message as claimed, as the telephone could be a separate operating system in the device.

Call cancellation as in feature (j) was also not disclosed in D1; instead, paragraph [0010] disclosed that there was a "clear" button and this could simply
be a clearing only of the destination information which had been incorrectly entered rather than a cancellation message of the call itself, even if "registration" was mentioned; it was thus not disclosed that a call was cancelled in the sense of the claim.

The respondent's arguments on implicit disclosure in D1 were hindsight-based, relating to perceived problems and their solutions as found in light of the patented invention's advantages.

VIII. The arguments of the respondent may be summarised as follows:

The subject matter of claim 1 lacked novelty over D1. The features of claim 1 which were disputed were either explicitly or implicitly known from D1. It was further not necessary that a feature be "required" in the system of D1 for it to be implicitly disclosed as had been suggested by the Board; the legal standard was whether it was immediately apparent to a skilled person that the feature was present in the prior art.

The appellant had not argued in its appeal grounds that feature (b) was novel compared to D1. Paragraph [0002] clearly referred to multiple elevator cars in a conventional system and the problems of the invention in paragraph [0003] related to those in such a conventional system. Furthermore, paragraph [0004] stated that the invention "was devised in consideration of the points described above", which meant that a multiple-elevator system was the context in which the invention in D1 had to be understood; it was only the preferred example which related to a single elevator.
Even the opposed patent itself made only a single reference to a multiple-elevator system, since this was implicitly understood to be present in the patent in the same way as a skilled reader would understand this to be present in D1.

A skilled person in the art of elevator systems would also understand D1 in such a way that it would be immediately apparent that features (i) and (l) were disclosed, i.e. that the individual remote controls were identified by a component of the call message and the call cancellation message. Several factors demonstrated this. First, proper and safe operation of the elevator system required identification of the particular remote control device. For example, the lights 12c or 12d which were lit upon call registration being responded to by control panel 5, were turned off on elements 12a and 12b on the remote control which had made the call when the lift arrived at the appropriate floor, and not on other remote controls on different floors. If the lights were extinguished on other remote controls, possibly on the same floor, the disadvantage of such a system would be immediately apparent, so that a skilled person immediately understood that remote control device identification in the transmitted message was a necessary part of the D1 system. As regards safety, if e.g. a door-close command was sent by a remote control device on a different floor to the one where the elevator car was positioned with an open door, this could obviously endanger someone entering the lift at that time. A skilled person would understand that the system had to exclude such a danger, and thus would only accept door-close commands from the remote control device which called the elevator car to
that floor; this was thus inevitably part of the disclosure of D1, and was only possible if the particular remote control device could be identified. Even if the system operated such that only the remote control device on a particular floor was in contact with its own hall transceiver to transmit a call to the control panel 5, the fact that this message could be identified as coming from a specific floor already meant that the call message or call cancellation message included an information component identifying the particular device used, since it was identified as being the remote device on a particular floor that transmitted the message to that particular transceiver. Further, paragraphs [0011] and [0013] disclosed a telephone on each remote control device used for making private calls between the remote control user and someone in the elevator car; this required specific identification of the remote control device from which the call was made. This worked in the same way as the elevator call message system. Even the word "telephone" made the skilled reader immediately understand that private calls were being made, even if this was not explicitly stated, so it was self-evident that the device making the call had to include a signal component identifying the specific device used to make the call, otherwise the telephones would not operate as intended. The appellant's reference to a separate telephone system was contrary to the disclosure in D1; the telephone disclosed in D1 used the same control circuitry.
The call cancellation activation means of feature (j) was disclosed by the clear button in D1, because its operation caused registration of the call signal to be cancelled, and registration occurred in the control panel 5.

Reasons for the Decision

1. Novelty of claim 1

1.1 The four features of claim 1 which the appellant submitted were novel with respect to the disclosure in D1 are features (b), (i), (j) and (l) as identified above.

1.2 Considering feature (b) first, this states:

"a plurality of elevators each having a car moveable within a related hoistway for transporting passengers vertically between floors of a building".

1.2.1 D1 discloses a plurality of elevators in paragraph [0002] when referring to the prior art. Paragraph [0003] relates to problems to be solved by the invention and notes a problem with "such a conventional system", which includes, by this reference, a plurality of elevators. However, the "objective" given in paragraph [0004] and the solution to this in paragraph [0005] are not concerned with a multiple-elevator system, but instead relate merely to use of "an elevator" rather than a system of multiple elevators. In particular, even though paragraph [0004] includes the statement "This invention was devised in consideration of the
points described above", the previously mentioned points, understood as being the problems mentioned, relate to those faced by a passenger (who wants to use the elevator) having to directly operate a hall button. No context of a multiple-elevator system is thereby implied. Also, the objective is explained as providing an elevator operating device in relation to "the hall call button", "the car" and "knowledge of the elevator car movement", i.e. always mentioning these in the singular. The abstract of D1 on page 1 of the translation also refers to "the elevator car". The embodiment ("Application example") in paragraph [0007] et seq also describes, consistently throughout, only "the elevator" and not a plurality of elevators. Notably, the elevator shown in Fig. 1 and described in paragraph [0007] "shows the relationship between the elevator provided with this invented operating device and the building". No mention is made of a plurality of elevators in the building, nor any system which should take account of a plurality of elevators in that or any other building.

1.2.2 Thus, whilst D1 has a prior art portion mentioning multiple elevator cars, nothing in the disclosure of the invention of D1 (which is the portion of D1 which contains the features of claim 1 of the opposed patent relating to a system including a plurality of remote control devices), makes any reference to multiple elevators, nor is this implied in any way by technical means or otherwise that are disclosed. In particular, whilst paragraph [0002] of D1 explains how a passenger calls a car in a multiple-elevator system, this does not imply that the description following that (which is concerned with a problem which is itself unrelated to
multiple-elevator systems) must be read in a multiple-elevator context.

1.2.3 It is thus not unambiguously derivable from D1 that the remote control device operated system in D1 concerns a multiple elevator system. On the contrary, in relation to the features of granted claim 1, D1 only discloses a system having a single elevator and the arrangement and operation of this system using remote control units on several floors.

1.2.4 The respondent argued that the lack of a plurality of elevators was not a feature of claim 1 which the appellant had argued as being lacking from the disclosure in D1. However, the decision under appeal itself contains reasons for the finding on this point (see item 2.2) which were made in relation to paragraph [0002] of D1. The Board thus reconsidered this matter (see Article 114(1) EPC 1973) in relation to further passages in D1 and in light of other disputed features. It lacks relevance that the appellant did not provide individual arguments to this specific matter in its appeal grounds and the respondent was aware of the issue as this aspect was taken up specifically by the Board in its provisional opinion.

1.2.5 The respondent also argued that because the opposed patent itself made only a single reference to a multiple-elevator system before describing its operation, this would have an implication as to how the skilled person read D1. However, the Board finds such an argument unconvincing. Not only is the disclosure in D1 entirely separate to that of the opposed patent, but the entire opposed patent relates to a system having a
plurality of elevators. The claims of the filed application and the patent are directed to this, and the patent depicts only elevator systems with a plurality of elevators, using an example of a four-car system (see e.g. Figs. 1 to 4).

1.2.6 It is also apparent in the system disclosed in D1 that no technical measures have been disclosed which would account for the use of multiple elevators, e.g. such as a car dispatcher arranged to operate with multiple cars in the remote control operating device system described in D1.

1.2.7 The respondent also argued that the correct legal standard to be used in determining whether an implicit disclosure is present is whether the feature in question is immediately apparent to a skilled person and not whether a feature is required. However, whether a feature is required is simply one way of determining whether a feature is immediately apparent to a skilled person. If a particular feature were required to perform a stated function of the system, even if not mentioned explicitly, it would then normally be understood to be implicitly present. Merely by the respondent stating that a feature being immediately apparent to a skilled person is the standard to be used does not alter the analysis of feature (b), nor of any other contested feature of claim 1 when considering the disclosure in the prior art, since merely using a different definition provides no substance to the argument as to why a feature would be otherwise seen as immediately apparent. Indeed the respondent itself, in its written submissions (see e.g.
item 3 of the 22 October 2010 submission) on this matter refers, in relation apparently to features (i) and (l), to the "necessity" of identifying distinct remote control units in D1, which the Board can only understand as being the same as a "requirement". Thus, none of the respondent's arguments in this regard alter the conclusions reached by the Board with regard to any of the contested features.

1.2.8 The Board thus finds that feature (b), as stated above, is not disclosed in D1 in connection with remote control operating devices as defined in claim 1, but only in the context of the prior art in D1. The subject matter of claim 1 is thus novel over D1 already for this reason.

1.2.9 Since a plurality of elevators, as in the claimed system, is not disclosed in D1, the Board also finds that the portions of features (e) and (f) of claim 1 relating to a plurality of elevators are also not disclosed in D1.

1.3 In regard to features (i) and (l), these state:

"(i) each call message transmitted by said device includes a component identifying the particular device that transmitted the message"

and

"(l) said call cancellation message including a component identifying the particular device that transmitted the cancellation message."
1.3.1 The aspect of features (i) and (l) which is not disclosed in D1 is that the messages include a component identifying the particular device that transmitted the message.

In D1, there is no explicit disclosure of a specific control device being identified. This was also not disputed by the respondent. Also, when considering the operation of the system, no disclosure of a specific control device being identified is thereby implied either. As stated in paragraph [0009] of D1, there are hall indicators 91 to 95 on respective floors 1F to 5F. It is also stated that each indicator is equipped with a transceiving part (which is later described as part 28) and that remote controllers 111 to 115 corresponding to each floor are carried by users or that these are installed corresponding to each floor. As depicted also in the Figures, and as described (see e.g. paragraphs [0015], [0022] and [0025]), the operation of the remote control device sends the control message via its own transceiver 26 to the transceiver 28 associated with one of the hall panels 91-95. Each of the hall panels containing its own transceiver is connected via a cable 10 to the control panel 5, which thereby acts as the central control unit.

Communication is thus made only from a remote control device on a specific floor with the hall panel on that same specific floor via transceivers. There is no disclosure that a remote control device on one floor may communicate via its transceiver with a hall panel transceiver on another floor as alleged by the respondent. Figure 1 also depicts by two-way arrows, a two-way communication between a single remote
controller 115 on one floor with a single hall panel 95 on that floor. There is thus no implicit disclosure of a call message including a component identifying the particular device which transmitted the message. Since a single elevator is disclosed in D1 for use with remote control devices using a single specific transceiver for each specific floor hall panel (91 – 95), the system is able to function without such means, even if certain disadvantages might on occasion present themselves. Merely because disadvantages might exist does not mean that a skilled person automatically adopts a different solution; such would be hindsight.

1.3.2 The respondent argued that correct and safe functioning would not be possible if the specific remote controller which had sent the message could not be identified, for which reasons an implicit disclosure of features (i) and (l) should allegedly exist. The Board however finds this unconvincing.

Due to each floor having its own floor-specific transceiver in the hall panel 91 to 95 for each floor respectively, the control panel 5 need only operate by communication with the transceiver on a particular floor when providing a two-way communication (see paragraph [0016] referring to transmission of signals and response signals). When the elevator is called using a remote device e.g. remote device 115 on floor 5F, the lights 12c and 12d (see paragraph [0016]) are lit up and then later turned off when the car arrives at that floor. The remote control devices on other floors are not affected, because these use a different hall panel transceiver on their respective floors. The same applies to door commands (e.g. door close) sent
from the remote control device; these only need affect
the elevator when it arrives at that specific floor via
that particular floor transceiver. No danger thus
exists by alleged acceptance of a floor close command
from a remote control on another floor, since
acceptance of such a close-door command from another
floor is not disclosed.

Thus, correct and safe operation of the system does not
require the identification of the specific remote
control device which transmitted the signal. The same
applies to a call cancellation signal, since this is
related to a call cancellation sent by a remote control
device, and will only be transmitted to the control
unit 5 by the transceiver on a specific floor.

It is true that if several remote control devices were
used on any single floor simultaneously, this might
lead to interference in some cases. However, D1 anyway
does not disclose the use of more than one remote
control device on any one floor at any one time, nor
would such necessarily pose a problem in view of the
specific floor communication between the different
remote control devices and the hall panel on that floor,
not least since only a single elevator is disclosed in
D1. Thus there is no implicit disclosure in D1 that
call messages or call cancellation messages can operate
as intended by D1 only if the identification of the
specific remote control device is transmitted as part
of the message.
Merely because drawbacks might exist in some cases, does not of itself make a different solution, namely that defined in claim 1, necessary or in any other way immediately apparent to a skilled person.

1.3.3 The respondent also argued that an information component was anyway included in the message signal, because the remote control device would be identified from the message signal as being that particular remote control device on a specific floor with which the transceiver 28 in the respective hall panel had communicated.

However, the Board finds this argument unconvincing. According to claim 1, not only is it the call message transmitted by the device which must itself include the component identifying it, as opposed to D1 where only signals from the floor transceiver would be recognised by control panel 5 as coming from that floor, but no identification of the "particular" device is made at all, merely an indirect association to the effect that an unspecified remote control device on a specific floor has sent a message to the hall panel transceiver on that floor.

1.3.4 The respondent further argued that the presence of a telephone as described in e.g. paragraphs [0011] and [0013] would imply identification of the particular remote control device, in particular so that the calls can be personal. This is however also found unconvincing.
First, nothing is stated in D1 as to any similarities between components of call messages transmitted from a remote control and the operation of a telephone as described in D1. Merely because the telephone on the remote control device operates through codec 25 for coding and decoding audio signals (paragraph [0013]) on the same remote control device which is used for call messages via the use of different codec 23 for coding and decoding call messages, does not imply any similarity between the signals let alone the necessity for the identification, by means of an included signal component, of the particular device which sent a call message. Nor does the presence of the word "telephone" imply to a skilled person that private calls are being made between a person outside the lift and an individual inside the lift, particularly not in 1992 when D1 was filed; even paragraph [0011] refers to calls between the remote controller carrier "and passengers" in elevator car (3), rather than to some type of private conversation between only two individuals or individuals each communicating with each other via their own remote controller telephone unit.

1.4 In regard to feature (j), this states

"said remote control devices each has a passenger activated means for initiating transmission of a call cancellation message".

1.4.1 The appellant argued that this feature was also not disclosed in D1, essentially because whilst feature (j) defined cancellation of a call message (which would be understood as cancellation of the entire call message), D1 allegedly merely cleared the destination input
information, it being noted that paragraph [0010] stated that registration due to incorrect operation of destination buttons was cancelled, not the call itself.

As explained below however, the Board finds that feature (j) is known from D1.

D1 states in paragraph [0010] that call "registration ..." is cancelled by using the clear button. This registration is then described further by stating that it is the registration "accompanying incorrect operation of destination buttons (131)-(13n)," a call being seen as "registered" is explained in paragraph [0005] as being one registered in the control panel 5. Paragraph [0017] explains the operation further in that pressing the destination button for a desired floor, which generates an "on" signal, causes this to be output from transceiver 26 to elevator-side transceiver 28 which then sends this to control panel 5. No further action is required on behalf of the user. Since the control panel 5 is where the registration takes place, and the pressing of a destination button causes this to occur, the clear button which cancels car registration accompanying incorrect operation of a destination button, can only be understood as cancelling the entire call.

No difference therefore exists between feature (j) and the disclosure in D1.

1.5 The subject matter of claim 1 is thus novel with respect to D1, such that the decision under appeal must be set aside.
2. Remittal of the case (Article 111(1) EPC 1973)

Only novelty of claim 1 with respect to D1 had been decided by the opposition division. Since lack of novelty with respect to a further document was also alleged and since no decision has been issued on that objection or upon the opponent's inventive step objections, the Board in exercising its discretion in accordance with Article 111(1) EPC 1973 concludes that the case should be remitted back to the opposition division for continuation of the opposition proceedings.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division for continuation of the opposition proceedings.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau