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**Datasheet for the decision
of 4 September 2013**

Case Number: T 1763/10 - 3.2.06

Application Number: 02004375.8

Publication Number: 1243544

IPC: B66B13/26

Language of the proceedings: EN

Title of invention:

Safety system for elevator doors

Patent Proprietor:

MITSUBISHI DENKI KABUSHIKI KAISHA

Opponent:

Otis Elevator Company

Headword:

Relevant legal provisions:

Keyword:

Amendments - added subject-matter (no)
Claims - clarity (yes)

Decisions cited:

Catchword:



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1763/10 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 4 September 2013

Appellant:
(Patent Proprietor)

MITSUBISHI DENKI KABUSHIKI KAISHA
7-3, Marunouchi 2-chome
Chiyoda-ku
Tokyo 100-8310 (JP)

Representative:

HOFFMANN EITLE
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

Respondent:
(Opponent)

Otis Elevator Company
10 Farm Springs Road
Farmington CT 06032-2568 (US)

Representative:

Leckey, David Herbert
Dehns
St Bride's House
10 Salisbury Square
London
EC4Y 8JD (GB)

Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted on 16 July 2010
revoking European patent No. 1243544 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman: M. Harrison
Members: M. Hannam
R. Menapace

Summary of Facts and Submissions

I. An appeal was filed by the proprietor against the decision of the opposition division revoking European Patent No. 1 243 544 due to the subject-matter of claim 1 according to each of a main request, a first and a second auxiliary request failing to meet the requirement of Article 123(2) EPC.

The objection under Article 100(c) EPC had been raised for the first time during oral proceedings before the opposition division.

II. With its grounds of appeal, the appellant (proprietor) requested that this ground for opposition not be admitted, or that it be found unsubstantiated. It also requested maintenance of the patent in an amended form based on auxiliary requests numbered auxiliary requests 2-6.

III. The respondent (opponent) requested that the appeal be dismissed, arguing that claim 1 as granted did not meet the requirement of Article 123(2) EPC, that claim 1 according to auxiliary requests 2-4 also failed to meet this requirement and in addition failed to meet the requirement of Article 84 EPC, and that claim 1 of auxiliary requests 5 and 6 failed to meet the requirement of Article 84 EPC.

IV. The Board issued a summons to oral proceedings including a communication containing its provisional opinion, in which it indicated *inter alia* that the opposition division appeared to have exercised its discretion correctly in admitting the ground of opposition under Article 100(c) EPC into the proceedings. It furthermore indicated that claim 1 as

granted (auxiliary request 1) and claim 1 according to auxiliary requests 2-3 appeared not to meet the requirement of Article 123(2) EPC, whilst claim 1 according to auxiliary request 5 appeared to meet this requirement. It also pointed out that the requirement of Article 84 EPC would be a point of discussion for auxiliary requests 2-6.

V. With letter of 26 July 2013 the appellant filed a new set of requests comprising a main request and auxiliary requests 1-3. The main request corresponded to auxiliary request 5 previously on file.

VI. Oral proceedings were held before the Board on 4 September 2013, during which the appellant filed a main request replacing all previous requests. It requested that the decision under appeal be set aside and the case be remitted to the opposition division for further prosecution.

The respondent requested that the appeal be dismissed or that the case be remitted to the opposition division for further prosecution.

VII. Claim 1 of the main request reads as follows:

"An elevator system having a pair of horizontally opposed vertical frame portions (42), upper and lower vertically opposed horizontal frame portions (44, 46) connecting uppermost, lowermost ends of the vertical frame portions (42) respectively, the opposed vertical and horizontal frame portions (42, 44, 46) defining an opening therein, and a slide door (38) moving horizontally to open and close the opening, comprising: a first optical device (78) having a light emitter (88) for emitting light and a second optical device (80)

having a light detector (90) for detecting the light emitted from the light emitter (88), characterized in that

one of the first and second optical devices (78) is mounted in a vertical surface of one of the opposed vertical frame portions (42) and the other of the first and second optical devices (80) is mounted in and substantially flush with a horizontal surface of the upper horizontal frame portion (46) and adjacent to the one vertical frame portion (42), wherein the first and second optical devices (78, 80) are positioned in a vertical plane crossing the opening and adjacent to the opening, so that the light from the first optical device (78) travels toward second optical device (80) along a gap (72) defined between the slide door (38) and the one vertical frame portion (42), and the one optical device (78) is mounted substantially flush with the vertical surface (82) of the vertical frame portion (42) so that it does not protrude from the vertical frame portion (42)."

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

The use of the functional definition '..so that it does not protrude from the vertical frame portion' to further define the mounting of the optical device in the vertical surface of the vertical frame portion did not introduce a lack of clarity *per se* (Article 84 EPC) and had been included as it was present in claim 2 as originally filed, from which the physical feature regarding mounting of the optical device in the vertical frame portion had been taken. The basis for this amendment was furthermore to be found on pages 9 and 10 of the description as originally filed, such that the requirement of Article 123(2) EPC was met.

The use of the word 'substantially' in order to qualify the flush mounting of the optical devices allowed acceptable tolerances to exist in the flush mounting of the devices and thus did not introduce a lack of clarity (Article 84 EPC).

IX. The respondent's arguments may be summarised as follows:

The functional definition 'so that it does not protrude from the vertical frame portion' had not been included with respect to both optical devices. This resulted in confusion for the reader and a lack of clarity (Article 84 EPC), since the apparently equivalent mounting arrangement of the two optical devices was defined in different ways, once with and once without the functional definition. The basis for this amendment was also lacking (Article 123(2) EPC).

The word 'substantially' relating to the flush mounting of the optical devices also introduced a lack of clarity (Article 84 EPC). This should be clarified with the function of the substantially flush mounting given on page 10, lines 9-11.

A possible interpretation of claim 1 was that the vertical plane, rather than the first and second optical devices, lay adjacent to the opening. There was here, therefore, a lack of clarity (Article 84 EPC).

Reasons for the Decision

1. Article 84 and Article 123(2) EPC
 - 1.1 The Board finds that claim 1 meets the requirements of both Article 84 and Article 123(2) EPC for the reasons below.
 - 1.1.1 A first added feature to claim 1, when compared to claim 1 as granted, is identified as 'one of the first and second optical devices is mounted in a vertical surface of one of the opposed vertical frame portions' and 'the one optical device is mounted substantially flush with the vertical surface'. A basis for this feature is found on page 9, lines 1-4 of the description as originally filed and in claim 2 as originally filed. These sources disclose the mounting of the optical devices in and flush with a vertical surface of the vertical frame portions independently of other features, that is without a structural or functional relationship to any other feature. It thus follows that 'the mounting in and substantially flush with a vertical surface' would be seen by the skilled person as a general disclosure applicable to the invention, also in its general form as defined by the further features of claim 1. This conclusion is also further borne out by the fact that the passage on page 9 corresponds to a first embodiment of the invention, yet the mounting in a vertical surface is common to all embodiments of the invention in which the optical devices are mounted to the frame of the elevator system.

The Board furthermore notes that, even though this was not objected to by the respondent, whilst the above passage on page 9 discloses the mounting of a first

optical device on both the left and right ends of the doorway, it is clear to the skilled person that the desired detection of the gap is possible with a single pair of optical devices located either on the left or the right end of the doorway as well as on left and right ends. This view is also supported by the fact that claim 1 as originally filed was directed to detection of the gap with optical devices on just a single end of the door opening. There is thus a clear and unambiguous basis given to the skilled person for the claimed pair of optical devices being located on just one side of the doorway.

The requirement of Article 123(2) EPC is thus met by this first added feature.

Regarding the clarity of the first added feature with respect to Article 84 EPC, the qualifier that the optical device is not only mounted in but also 'substantially flush with' a vertical surface of the vertical frame portion, defines the location and mounting of the optical device relative to a vertical surface of the frame in a clear manner, such that the skilled person is left in no doubt as to the spatial relationship of the optical device with respect to the vertical surface of the frame.

- 1.1.2 Regarding the second added feature 'the other of the first and second optical devices is mounted in and substantially flush with a horizontal surface of the upper horizontal frame portion', a basis for this is found on page 9, lines 4-6 in conjunction with page 10, lines 7-8. These passages of the originally filed description, when read by a skilled person, disclose the other of the first and second optical devices in structural and functional isolation from any other

feature (apart from the other of the first and second optical devices), such that the adoption into claim 1 is regarded as resulting in subject-matter which is clearly and unambiguously derivable from the application as originally filed (Article 123(2) EPC).

Regarding this second added feature, similarly to the first, it is clearly defined for the skilled person how the optical device is to be arranged relative to the horizontal surface of the frame, i.e. mounted in and substantially flush with a horizontal surface of the upper horizontal frame portion.

- 1.1.3 Regarding the third added feature 'wherein the first and second optical devices are positioned in a vertical plane crossing the opening and adjacent to the opening', this exact wording was in claim 1 as originally filed and is clearly and unambiguously disclosed in combination with the other features present in claim 1, notably those of the Fig. 4 embodiment described on page 9, lines 1-6, such that no objection under Article 123(2) EPC arises. The respondent also raised no objection in regard to Article 123(2) in respect of this feature.

The Board finds, from a normal reading of the wording of this added feature, this means that the first and second optical devices are positioned in a vertical plane crossing the opening and that they are positioned adjacent to the opening. The alternative interpretation of this sentence, argued by the respondent, that it could be the vertical plane rather than the first and second optical devices that is adjacent to the opening, does not follow from such a normal reading. The use of the conjunction 'and' linking the two phrases 'in a vertical plane crossing the opening and adjacent to the

opening' clearly describe to the skilled person two attributes of the first and second optical devices. The Board in this respect thus sees no lack of clarity in the wording of the claim.

These two conditions placed on the location of the optical devices can technically be realised in just one logical way with respect to the positioning of the optical device on a vertical surface of the frame; namely that the optical device is mounted in and flush with the vertical surface facing the claimed opening, such that the vertical plane in which the optical devices are positioned will cross the full width of the opening between the opposed vertical frame portions. This is as disclosed in the embodiment of Fig. 4. The alternative realisation of the optical device being mounted in a vertical surface not facing the opening (an example of a vertical surface not facing the opening being the front surface of one of the vertical walls 48 depicted in Fig. 2 of the patent), is not technically logical as, in such a realisation, absent any further means, the light emitted from one optical device would not be readily detected by the other optical device.

The mounting of the optical device with respect to the vertical surface of the frame as described by this third added feature can thus be clearly understood by the skilled person (Article 84 EPC).

- 1.1.4 Regarding the fourth added feature 'the one optical device is mounted substantially flush with the vertical surface of the vertical frame portion so that it does not protrude from the vertical frame portion', claim 2 as originally filed in combination with page 9, lines 4-6 in conjunction with page 10, lines 7-8 provide the

basis for this. As already reasoned in point 1.2.1, these passages of the originally filed description disclose that the one of the optical devices is arranged in the vertical surface of the frame in structural and functional isolation from any other feature (apart from those claimed), such that the adoption into claim 1 results in subject-matter which is clearly and unambiguously derivable for a skilled person from the application as originally filed (Article 123(2) EPC).

The respondent argued that the functional definition 'so that it does not protrude from the vertical frame portion' had not been included in relation to the second added feature of claim 1. This allegedly resulted in confusion for the reader, and thus a lack of clarity under Article 84 EPC, since the identical mounting arrangement of the two optical devices was defined in different ways, once with and once without the functional feature.

The Board does not concur with this view. The fourth added feature includes the functional definition since this was included in claim 2 as originally filed and the features of this claim have been incorporated in their entirety into the present claim 1. The presence of the functional definition, however, has no structural impact on the mounting of the optical device in terms of its spatial interrelationship being "in and substantially flush with" the vertical surface of the vertical frame portion. The definition of the optical device being substantially flush with the surface in itself implies that it does not protrude from said surface to any extent apart from assembly tolerances (see also the following paragraph). It thus follows that, with the skilled person being presented with no

additional physical limitation of the mounting arrangement by way of the functional definition, the lack of an equivalent functional definition in the second added feature cannot lead to a lack of clarity according to Article 84 EPC.

Regarding the alleged lack of clarity resulting from the word 'substantially' in the expression 'substantially flush with a vertical surface', the skilled person would however understand that, seen technically, something defined as 'substantially flush' would be flush within the inevitable errors in assembly tolerances for such an arrangement. In the present case, this would equate to the optical device being mounted flush with the surface within an acceptable assembly tolerance understood by the skilled person. The expression is thus clear to the skilled reader of the patent and the expression meets the requirement of Article 84 EPC.

- 1.1.5 No further objections under Article 84 EPC were raised by the respondent to claim 1 of the main request, nor did the Board itself find reason to object to the claim under this Article.
- 1.1.6 The Board thus concludes that claim 1 of the main request meets the requirements of Articles 84 and 123(2) EPC.
2. With claim 1 of the sole request, the reasons for revoking the patent in the appealed decision no longer exist. Since no examination of novelty or inventive step (at least) was carried out by the opposition division in respect of the subject-matter of claim 1 (also prior to the amendment), the Board considers it appropriate to exercise its discretion under Article

111(1) EPC to remit the case to the opposition division for further prosecution. It is also to be noted that both parties requested that the case be remitted.

Merely for the sake of clarification, it may be mentioned that the Board has not considered the requirements of Articles 84 and 123(2) EPC as regards dependent claims 2-13, nor has any further examination of claim 1 been made beyond that required for reaching a conclusion with respect to Articles 84 and 123(2) EPC.

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 further prosecution.

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated