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**Datasheet for the decision
of 4 March 2008**

Case Number: T 1706/06 - 3.2.01

Application Number: 96910110.4

Publication Number: 0828657

IPC: B64D 25/00

Language of the proceedings: EN

Title of invention:
EMERGENCY LIGHTING

Patentee:
STG Aerospace Ltd.

Opponent:
MADELEC AERO

Headword:

-

Relevant legal provisions:
EPC Art. 123(2)

Relevant legal provisions (EPC 1973):
EPC Art. 56, 116

Keyword:
"Oral proceedings - submissions by accompanying persons (no)"
"Amendment to a party's case (yes)"
"Amendments - added subject-matter (no)"
"Inventive step (yes)"

Decisions cited:
G 0004/95, T 0743/89, T 0472/92, T 0970/93

Catchword:

-



Case Number: T 1706/06 - 3.2.01

DECISION
of the Technical Board of Appeal 3.2.01
of 4 March 2008

Appellant: STG Aerospace Ltd.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
19 September 2006 concerning maintenance of the
European patent No. 0828657 in amended form.

Composition of the Board:

Chairman: S. Crane
Members: J. Osborne
S. Hoffmann
C. Narcisi
G. Weiss

Summary of Facts and Submissions

I. The appeals by both the patent proprietor and the opponent are directed against the decision posted 19 September 2006 according to which European patent No. 0 828 657, claiming priority dates of 20 April 1995 and 8 March 1996, and the invention to which it relates were found to meet the requirements of the EPC 1973.

II. The following evidence is relevant to the present decision:

D1: WO-A-94/17766;

D9: Supplemental Type Certificate No. SA10008GL,
USA Department of Transportation - Federal
Aviation Administration

IN13si: Publicity leaflet "INTRAD News Edition 13
Special Issue", PJP Trading Limited.

The opponent supplied *inter alia* the following documents regarding public availability of IN13si:

SE1: Front cover of a catalogue "INTRAD®
Permalight" dated September 1989;

SE2: Declaration by Gunnar Krokeide;

SE3: Declaration by Richard Clark;

SE4: E-mail correspondence between Richard Clark
and USPTO;

- SE5: Fax message from BBC Children in Need Appeal;
- SE6: Letter dated 21 March 2001 from Richard Clark;
- SE7: Letter dated 18 July 1989 from Peter Clark to Permalight GmbH;
- SE8: List of exhibitors at 'FIREX South '89'.
- III. The board summoned the parties to oral proceedings to be held on 4 March 2008, indicated its provisional opinion on some matters and advised the parties that "Any further requests or written submissions should be filed at least one month before the date set for oral proceedings." With a letter dated 4 February 2008, received at the EPO on the same day, the patent proprietor filed amended requests. With a letter also dated and received on 4 February 2008 the opponent indicated that its representative at the oral proceedings would be accompanied by Mr John Creak and requested that he be allowed to speak as a technical expert.
- IV. At the oral proceedings the patent proprietor initially requested *inter alia* that the description of the patent specification be corrected in accordance with Rule 88 EPC 1973, that the contested decision be set aside and the patent maintained on the basis of claims 1 to 12 as granted (main request) or in the alternative in amended form on the basis of respective claims according to first to eighteenth auxiliary requests filed with the letter of 4 February 2008. The opponent requested *inter alia* that the patent proprietor's auxiliary requests of

4 February 2008 not be admitted. The patent proprietor subsequently replaced all of its requests by a new sole request to set aside the contested decision and maintain the patent on the basis of claims 1 to 9 submitted during the oral proceedings. The opponent's final request was that the contested decision be set aside and the patent revoked.

V. Claim 1 according to the patent proprietor's final, sole request reads:

"An aircraft (10) having a passenger holding area including rows of seats either side of an aisle, an emergency exit path lighting system (14) comprising photoluminescent guide means (16;16') mounted at or near floor level and adapted to photoluminescence (*sic*) in an emergency situation to indicate to a user a path for movement from any point in the passenger-holding area to a region of an emergency exit (12a,12b,12c,12d, 12e,12f) without requiring input of activation energy or signals at that time and independently of the provision of electrical power at the time of an emergency, the photoluminescent guide means (16;16') comprising two elongate photoluminescent tracks (51,52) spaced apart so as to define therebetween the path within which the user should move, characterised in that each photoluminescent track (51,52) comprises of a base member (18) secured to the floor, a transparent or translucent cover member (20,20') releasably secured to the base member and a photoluminescent guide member (22) sandwiched between the base member and the cover member wherein the photoluminescent guide member (22) comprises two or more layers of photoluminescent material provided on a base and the base member (18)

has a support formation that supports the guide member so that it can withstand being trodden upon."

Claim 1 is followed by claims 2 to 9 which specify features additional to those of claim 1.

VI. The parties' submissions in as far as they are relevant to the content of this decision may be summarised as follows:

The request for Mr Creak to be heard as a technical expert

In the view of the patent proprietor the request did not set out in detail which information Mr Creak might provide and was filed too late for adequate preparation of a response. Moreover, the matters on which Mr Creak should speak had been contested for a long period of time and he was not an independent expert appointed by the board.

The opponent countered that Mr Creak was being offered to answer any questions from the board on the matters which had been set out in the letter of 4 February 2008. No new matter would be introduced. Mr Creak works for Jalite to which SE6 was addressed.

Admittance of the requests filed with the letter of 4 February 2008

The opponent submitted that although these requests were sent to the board by the normal means, namely fax, a copy to the opponent was sent by post and received on 7 March 2008, less than one month before the oral proceedings. The patent proprietor failed to clearly

indicate all amendments which had been made and this in combination with the large number of requests placed an undue burden on the opponent. As a result, the opponent was placed at a disadvantage and the requests should not be admitted.

The patent proprietor argued that the requests were received by the board by the set date. The requests differed from those previously filed only by amendments made in response to the board's observations. Although the amended requests were supplied by post to the opponent, they nevertheless were received sooner than the copies which were forwarded by the board.

Public availability of IN13si

The patent proprietor argued that there was insufficient proof that IN13si had been made available to the public before the priority date. IN13si is undated and none of the evidence filed in support of its alleged availability to the public establishes a date of publication or even that IN13si was, in fact, published. The patent proprietor has no access to the background of IN13si and is restricted to indicating the weaknesses in the opponent's case. Analogy with case law in respect of prior use shows that the applicable standard of proof is 'up to the hilt'. The patent proprietor does not accept that printing the document is tantamount to its publication. The evident length of time taken in the preparation of IN13si indicates that it would have become available after SE1 and therefore at a time when it would no longer have been of interest. The statement by Mr Krokeide (SE2) is not believable since although he states that he

received IN13si thirteen years earlier he is apparently unable to recall where or how. The opponent reasons that Mr Krokeide would have attended two exhibitions in 1989 and has shown that PJP Trading Limited exhibited at one of those. However, it is to expected that Mr Krokeide would have attended similar exhibitions in other years and the evidence contains nothing to provide a link to the particular year 1989. Mr Richard Clark's declaration (SE3) states his position in PJP plc in 2002 but not in PJP Limited in 1989 so it does not necessarily follow that he would have known anything about IN13si. The correspondence with the USPTO (SE4) adds nothing which is not contained in the other SE documents. It is notable that the opponent has failed to provide any hard evidence that IN13si was sent to a particular customer on a particular date. According to case law of the boards of appeal mere statements are insufficient means of evidence.

The opponent countered essentially that, as established by SE2, IN13si had been obtained by a third party and therefore by definition had been made available to the public. SE3 from Mr Clark was supplied at the request of the opposition division but the correspondence with the USPTO (SE4) was independent of this case. The opponent has furnished many documents relating to the preparations for publication of IN13si and has provided reasoning why it was undated. This case is not comparable with one of prior use by the opponent since all of the information comes from third parties.

Disclosure of IN13si

The patent proprietor argued that anyway IN13si would not be an enabling disclosure for the skilled person. The normal field of application of photoluminescent material was in buildings in which marked routes normally are illuminated. Under those circumstances the photoluminescent material would be fully charged before an emergency when the electrical power supply may fail and resulting in the need to evacuate. Aircraft flying on long haul routes, on the other hand, are without interior lighting for several hours with the result that photoluminescent material available in 1989 would not have been suitable for the purpose indicated in IN13si. IN13si merely speculates on possible application in aircraft without addressing such issues. Moreover, the possible physical forms of the photoluminescent material which are disclosed in IN13si would not be suitable in the way suggested for use on the floor of an aircraft. For a disclosure to be enabling it must provide the skilled person with sufficient information for him to put its teaching into practice. The speculative nature of the disclosure is illustrated by the figure which evidently aims to lead passengers to the cockpit.

The opponent's view was that claim 1 according to the patent proprietor's request leaves open which photoluminescent material may be used and so this feature may be interpreted in its broadest sense. The skilled person presented with IN13si would employ a guide member which would be suitable for use on a floor and use any appropriate material which was available before the priority date.

Amendment of claim 1

In the view of the opponent claim 1 has been amended during the appeal proceedings in such a way as to offend the provision of Article 123(2) EPC. It argues that according to the claim the base member has a support formation and so excludes the embodiment of figure 1. In the only other relevant embodiment, that of figure 3, the support formation is in the form of a box member. However, that feature has not been taken into claim 1. Moreover, the original disclosure was of the photoluminescent guide member being sandwiched not between the cover and the base, as presently claimed, but between the cover member and the support formation.

The patent proprietor countered that in the embodiment of figure 1 the base has a non-integral support formation and does not fall outside of claim 1. The specification in claim 1 of the guide member being sandwiched between the base member and the cover member was originally disclosed in page 3 of the application as published.

Inventive step

The opponent argued that the two features in claim 1 of the form of the track and a plurality of layers of photoluminescent material are juxtaposed. As regards the plurality of layers of photoluminescent material, it argued that the disclosure of the patent specification in respect of a plurality of layers includes no comparative results indicating parameters such as thicknesses or pigments. In the absence of such

supporting evidence the plurality of layers would be an obvious measure to achieve the desired thickness if this were not possible in a single layer. D1 discloses the use of photoluminescent material in at least one of a plurality of layers in emergency lighting tracks. The disclosure is primarily in the context of buildings but extends also to aircraft and boats. Similarly, the application in the present case originally indicated that the concept was applicable also to vehicles other than aircraft. The concept of the track form is based on retro-fitting existing ("Grimes") tracks as known from D9 by removing the electrical components and installing the photoluminescent material. The cover of the Grimes track is necessarily translucent. The problem is to find a convenient way of replacing the electrical lighting. IN13si discloses a suitable tape to solve the same problem and it would be an obvious measure for the skilled person to place that beneath the cover in order to protect it from damage. Indeed, that would be the only solution because if the cable cover were removed and the tape placed at the floor of the cable channel it would be masked by the sides of the channel. The Grimes track is already certified and known to resist mechanical damage, the cable cover acting as a support for the cover.

The patent proprietor's response was that the closest state of the art would not be D9 but IN13si since that already had discarded electrical illumination. D1 does not disclose two or more layers of photoluminescent material. The patent proprietor had found two layers to not only provide better light emission than a single layer but also be easier and cheaper to manufacture. The results of tests of the glow properties for a dual-

layer strip of photoluminescent material are given in the description. As regards the mention in D1 of buildings, aircraft and ships, as already explained in respect of IN13si, aircraft differ in that the photoluminescent material is not necessarily fully charged immediately before an emergency evacuation. The improved light emission achievable with two or more layers renders the material suitable for use in aircraft. As regards the form of the track, the patent proprietor argued that the opponent's approach was based on an *ex post* consideration. If the skilled person, devoid of imagination, were to modify the tracks known from D9 by detaching the cable covers and removing the electrical components he would not then refit the cable covers. IN13si only discloses surface-mounted photoluminescent material so the skilled person would follow that teaching and simply attach it to the outside of the cover. Simply replacing the electrical lamps by photoluminescent material would not result in the subject-matter of claim 1 because the cable covers are present only between the lamps. Moreover, the Grimes tracks according to D9 are not on either side of the aisle to indicate a path but only on one side at each end.

Reasons for the Decision

Procedural matters

1. The question of whether an accompanying person may make oral submissions on technical issues during oral proceedings has been considered by the Enlarged Board of Appeal in decision G 4/95 (OJ EPO 1996, 412). It held that such oral submissions could not be made as a

matter of right but only at the discretion of the board. The Enlarged Board set out that a professional representative when requesting permission should *inter alia* make the request sufficiently in advance that all opposing parties are able properly to prepare themselves in relation to the proposed oral submissions. In particular, it stated that a request made shortly before the oral proceedings should, in the absence of exceptional circumstances, be refused unless each opposing party has agreed to the making of the oral submissions requested. In the present case the patent proprietor did not agree.

- 1.1 At the time that the opponent formulated its request for Mr Creak to be heard the claims on file were those introduced with a letter notified to the opponent in August 2007. It follows that the opponent, which had already filed an auxiliary request for oral proceedings in its statement of grounds of appeal, waited some months before deciding to request that Mr Creak be heard and then filed that request only one month before the oral proceedings. Under these circumstances the filing of the request for Mr Creak to be heard must be considered as having been made 'shortly' before the oral proceedings. No exceptional circumstances existed which would have justified the board departing from the guidance given in decision G 4/95 (*supra*) and, moreover, on the basis of the information given by the opponent it appeared that any statements made by Mr Creak would not have advanced the case.
- 1.2 The board at the oral proceedings therefore exercised its discretion to refuse the request for Mr Creak to be heard.

2. When the board summoned the parties to oral proceedings it indicated that any amended requests should be filed at least one month before the set date. The patent proprietor complied with this by filing amended requests by fax on the final day (4 February 2008) before that period. A copy sent by post to the opponent was received by its representative three days later. Although the patent proprietor's requests ran to a total of nineteen sets of claims, eight even-numbered requests were for a single claim 1 identical to that of the respective preceding odd-numbered request. Moreover, some of the claims 1 essentially corresponded to those previously filed but amended as explained by the patent proprietor in order to overcome objections raised by the board when summoning the parties to oral proceedings. Whilst some amendments in the dependent claims of some requests were made without being clearly identified the opponent's representative admitted at the oral proceedings that it nevertheless had been able to fully prepare for the requests in the time available. Essentially that same amount of time was available to the board for its preparation and was found to be sufficient. Whilst a combination of factors may have resulted in a somewhat less than favourable situation, the board considers that the opponent was not unduly burdened thereby. The board therefore decided at the beginning of the oral proceedings not to disregard the patent proprietor's requests filed on 4 February 2008. Claim 1 of the proprietors final request corresponds in essence to claim 1 of the seventh auxiliary request filed on that date.

Substantive matters

3. The patent relates to an emergency exit path lighting system in a passenger aircraft. The system comprises guide members placed on the floor to visibly mark the path to an emergency exit when, for instance, the upper layer of the cabin is filled with smoke. Such systems conventionally employ electrical lighting powered by batteries but suffer disadvantages such as high maintenance costs and sensitivity to structural integrity of the aircraft. The patent sets out to overcome these disadvantages by providing photoluminescent guide means.

Amendments

4. Claim 1 differs from claim 1 as granted essentially by the addition of the features in the characterising portion. These were disclosed in the application as originally filed in the second full paragraph on page 3, the third paragraph on page 6 and in the description of the embodiments of figure 1, bridging pages 15, 16 and of figures 2, 3, on page 19.
 - 4.1 In the embodiment of figure 1 the base member includes a horizontal base section 18 and two upstanding flanges which form a channel closed by a releasably fitted support formation 23. The embodiment of figures 2, 3 differs in that the support formation 23' is integral with the upstanding flanges, thereby forming a box-section. The opponent takes the view that the wording "base member has a support formation" in present claim 1 excludes the embodiment of figure 1. As a result, it considers present claim 1 to be an

impermissible generalisation of the disclosure of the embodiment of figure 2, 3 in as far as it does not specify the feature of a box-section. However, the specification in present claim 1 that when installed in the aircraft "the base member has a support formation" does not exclude that the support formation be a separate piece which is releasably attachable to the base member. Indeed, the second sentence on page 19 as originally filed states when comparing the embodiment of figures 2, 3 with that of figure 1: "instead of having a separate support formation ...", thereby explicitly specifying that in the embodiment of figure 1 the base member 'has' a support formation.

5. The opponent argues that according to the original disclosure the photoluminescent guide member was not "sandwiched between the base member and the cover member" as in present claim 1 but sandwiched between the support formation and the cover member. However, the present wording of the claim was explicitly disclosed in the centre of page 3 of the application as originally filed.
6. Present claims 2 to 9 essentially differ from claims 4 to 10 and 12 as granted only in as far as they were amended for consistency with the amendments to claim 1. Similarly, the description has been amended only for consistency with present claim 1.
7. On the basis of the foregoing the board concludes that the amendments made by the patent proprietor do not offend the provision of Article 123(2) EPC.

8. The description was amended for consistency with the claims according to the patent proprietor's sole request. The board is satisfied that no objections arise from the amended description and none was brought forward by the opponent.

State of the art

9. IN13si is an undated publicity brochure produced by a company PJP Trading Limited and is almost exclusively concerned with applications of a photoluminescent material called Permalight. The final page proposes the use of Permalight material each side of an aisle for escape guidance in aircraft. The status of IN13si as state of the art is contested by the patent proprietor.

- 9.1 Although IN13si carries no printing date there are several indications that it was at least intended for publication late in 1989:

- It carries a reference to a "new" publication "INTRAD Permalight". The associated illustration is visibly the same as SE1 which carries a publication date of September 1989;
- In SE2 Mr Krokeide stated in 2001 that he was in possession of IN13si which was received at an exhibition in 1989 where a company INTRAD Permalight had a booth. SE8 shows that PJP Trading, whose name is on IN13si, exhibited at "FIREX South '89" which took place from 10-12 October 1989;
- IN13si carries a reference to a then planned fund-raising campaign ending on "17 November" to coincide

with a television transmission of the Children in Need Appeal. In SE5 the BBC has confirmed that in 1989 a Children in Need Appeal programme was transmitted on 17 November;

- In SE3 Mr Richard Clark states that he had been employed at PJP plc and formerly PJP Trading, which is stated in IN13si to be the publisher of that document, since 1985 and that IN13si had been prepared and sent to customers as a support medium for the publication SE1. He further states that IN13si was made available to customers prior to availability of SE1 in September 1989;
- In SE4 Mr Richard Clark also states in response to questions from the USPTO that IN13si was published in Autumn 1989;
- SE6 is a letter from Mr Richard Clark having essentially the same content as SE3 but having the reference "Jalite Reply re. Intrad News (Wrd)" and so apparently addressed to a third party;
- SE7 is a letter dated 18 July 1989 on "INTRAD"-headed paper from a Mr Peter Clark to Permalight GmbH in preparation for a meeting. One discussion point is listed as IN13si and states the publication date to be September 1989.

9.2 On the basis of the above it is convincingly established that if IN13si were made available to the public it would have been in late 1989 and therefore so far in advance of the earlier priority date of the present patent that an exact date need not be

determined. The critical matter is whether IN13si was, in fact, published. In the case of a publicity brochure there is an implicit presumption of availability to the public without any obligation of confidentiality, cf. T 743/89, reasons, 3rd paragraph (not published in OJ EPO). Moreover, in the present case there are the statements by Mr Krokeide (SE2) that he was in possession of a copy of IN13si and Mr Richard Clark (SE3, SE4, SE6) that IN13si was distributed to the public. The patent proprietor argues that according to case law of the boards of appeal mere statements are insufficient as evidence. However, this is not so since the principle of free evaluation of evidence applies, cf. T 970/93, reasons 2.8 (not published in OJ EPO).

- 9.3 The patent proprietor argues that there are inconsistencies in the evidence presented by the opponent and that, as a result, the opponent has not proved its case to the necessary level, namely beyond all reasonable doubt ('up to the hilt'). That standard of proof has been held as being appropriate when only one party has access to information and the other party is reduced to merely pointing out inconsistencies or gaps in the chain of evidence, cf. T 472/92 (OJ EPO 1998, 161). That is not so in the present case since all of the evidence supplied by the opponent derives from third parties. Nevertheless, the patent proprietor relies solely on attempting to show inconsistencies and has neither offered declarations by other persons nor sought to have either Mr Krokeide or Mr Richard Clark heard as a witness. Moreover, the patent proprietor failed to convince the board as regards inconsistencies. In particular:

- Even if IN13si were published after SE1 it would not have rendered the former redundant because it was used to promote interest in the products which evidently were contained in SE1 by giving information about their possible applications; the suggestion of the patent proprietor that PJP Trading would have simply discarded as no longer relevant the copies of IN13si which had been printed (the printing as such is not disputed) is in contradiction with both the content of the document and its intended purpose as stated by Mr Richard Clark);

- The patent proprietor argues that the statements in SE2 and SE3 are incomplete in as far as they do not contain some information which may be of relevance in determining when IN13si was published. However, as already set out above, SE2 is more important as regards IN13si being in the possession of a third party than when this occurred. Similarly, SE3, which is supported by SE4 and SE6, is primarily of value in establishing whether or not IN13si was made available to the public;

- The fact that Mr Krokeide mistakenly attributed the document IN13si to a non-existent company "INTRAD Permalight", whereas this is in fact the name of the product featuring in the document, cannot discredit the general thrust of this statement that the document was obtained at an exhibition in 1989;

- As regards the absence from the file of specific recipients of IN13si, the board notes that this document is not a saleable product in itself but is

merely for information. Whilst it would be expected that PJP Trading would have kept a record of addressees to which IN13si was sent, Mr Richard Clark stated in SE4 in 2003 that the company was no longer active in the market of photoluminescent materials. Under these circumstances it would be understandable that records of addressees of IN13si, which related almost exclusively to those products, would be no longer available.

- 9.4 It is to be expected that over the course of the time inaccuracies and lacunae can creep into the recollections of events that happened several years before. Any such discrepancies in the present case are however not of a nature which throw the veracity of the statements of Mr Krokeide and Mr Richard Clark significantly into doubt. On the basis of the whole of the evidence before it, the board is convinced that IN13si was indeed made available to the public in 1989 and thus belongs to the state of the art.

Disclosure of IN13si

10. IN13si on the penultimate page lists various "standard" Permalight photoluminescent material products. These include tapes, floor coverings and stair nosing. On the final page various applications of Permalight photoluminescent material are suggested. Some applications relate to buildings but it is also suggested that the material may find use for providing directional guidance and a sense of orientation in an aircraft. In particular, it proposes that Permalight be used to mark-out aisles and applied to large areas to provide a target for escaping people if placed at the

end of an aisle adjacent to an exit. An illustration shows a path along the aisle of an aircraft marked by two lines of photoluminescent material on the floor. At the end of the aisle there is shown a large rectangular area on the wall and the two lines deviate sideways in front of the seats.

10.1 The patent proprietor does not contest that all features of the preamble of present claim 1 can be seen in IN13si. It does argue, however, that for the skilled person at the effective date of the present patent IN13si was not a genuine disclosure of those features because it would have been regarded as speculative and non-enabling. In particular, it argues that IN13si does not disclose a physical form of Permalight appropriate for use along the aisles and that its light emitting properties were not suitable for use in aircraft.

10.1.1 IN13si discloses that the product Permalight was available as *inter alia* tapes for marking escape routes on floors and as flexible vinyl sheet having markings applied to it. In the board's view both of these would be suitable for use in an aircraft. The patent proprietor argues that the vinyl sheet would be unsuitable because of flammability and, moreover, would be rejected since aircraft cabins are carpeted. As regards flammability, however, the board notes that the photoluminescent strip according to the present patent may be vinyl (patent specification page 5, lines 54 to 57). Furthermore, even if the skilled person would reject the use of vinyl sheeting for covering the aircraft floor, it would be evident to him that the width of the sheet need be no greater than the strip of

photoluminescent material, thereby effectively creating a vinyl track for application to an existing carpet.

- 10.1.2 As regards the light emitting properties, the patent proprietor argues that emergency escape routes in buildings typically are illuminated at all times when occupied so that the light emitting properties of photoluminescent material need be effective only for the duration of an evacuation. Aircraft on long haul flights, on the other hand, typically operate for several hours with the cabin in darkness during which time the photoluminescent material would discharge. The patent proprietor deduces that the skilled person would have recognised the suggestion in IN13si to use photoluminescent material in aircraft as being impractical. The board disagrees because neither present claim 1 nor the disclosure of IN13si specifies applicability to all aircraft and small aircraft having a limited range would not normally operate with the cabin in darkness.
- 10.1.3 The board also considers that the relevant part of the disclosure of IN13si is not speculative in as far as it not only suggests the photoluminescent material to be used, namely Permalight, but also proposes both a suitable physical form and a practical layout. Moreover, the large area shown on a wall and described as a "target" is, contrary to the patent proprietor's assertion, not necessarily the door to the cockpit but may be simply a bulkhead. The content of other parts of IN13si relates to other applications and is not relevant to the present case.

- 10.2 On the basis of the foregoing the board finds that IN13si does constitute an enabling disclosure.

Inventive step

11. IN13si represents the closest state of the art because it already addresses the problem of providing emergency lighting in an aircraft. It discloses the features contained in the preamble of claim 1. However, it does not disclose details of how an existing aircraft having an electrical emergency lighting system might be modified and the skilled person wishing to implement the proposal of IN13si in an existing aircraft would face the problem of providing a practical embodiment. The features in the characterising portion of present claim 1 relating to the form of the track provide a solution to that problem. The remaining characterising features relating to the dual-layer structure of the photoluminescent guide member improve its performance, cf. paragraph [0030] of the patent specification.

- 11.1 The skilled person when applying the teaching of IN13si to new aircraft would search for the simplest, lightest and lowest cost solution and thereby apply photoluminescent material in a suitable form directly to the floor. The same solution would be applicable to existing aircraft but would involve removal of the conventional ("Grimes") tracks. A lower cost alternative which would offer the desired greater reliability but at the expense of higher weight would be to remove the redundant wiring, lamps and cable covers from the tracks and simply apply the photoluminescent guide member to the outer surface of the track outer cover.

11.2 The Grimes track comprises a base, a cable cover, which together with the base forms a closed channel to contain the wiring, and a clear outer cover (see D9). The idea put forward by the opponent that the skilled person when opting to retain the tracks in existing aircraft would replace the cable covers and then position the photoluminescent material on them does not follow in a logical fashion from the state of the art even in combination with the knowledge of the skilled person. In particular, the combination of IN13si and D9 contains no teaching to position the photoluminescent material beneath a cover. Indeed, in view of the additional characterising feature in claim 1 of a plurality of layers in order to improve the photoluminescent performance of the guide member it would not be immediately evident to place the guide member beneath the track outer cover which, although clear, nevertheless would reduce the effective light emission. Moreover, it cannot be derived from the state of the art that the cable covers in the Grimes track serve any purpose other than hiding wiring because they are present not throughout the length of the tracks but only between the lamps. After detaching the cable covers in order to remove the wiring the skilled person therefore would not be motivated to replace them. Additionally, according to D9 the existing installations do not have two tracks marking the emergency path but a single track on opposing sides at each end so that the subject-matter of claim 1 anyway could not result from the simple application of guide members to existing tracks.

11.3 It follows from the above considerations regarding modifying the Grimes track that even if, as argued by the opponent, D9 were taken as the closest state of the art, the skilled person still would not arrive at the subject-matter of claim 1 in an obvious manner.

11.4 The board concludes from the foregoing that the subject-matter of present claim 1 involves an inventive step. Since claims 2 to 9 contain all features of claim 1 this conclusion applies to those claims also.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to maintain the patent in amended form on the basis of the following documents filed during the oral proceedings:
 - claims 1 to 9

 - description pages 2 to 10

 - figures 1 to 6.

The Registrar:

The Chairman:

A. Vottner

S. Crane