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D E C I S I O N
of 24 November 2004

Case Number: T 0996/00 - 3.2.4

Application Number: 92302182.8

Publication Number: 0508609

IPC: F02K 9/76

Language of the proceedings: EN

Title of invention:
Modular solid-propellant launch vehicle and related launch facility

Patentee:
Northrop Grumman Corporation

Opponent:
Centre National d'Etudes Spatiales

Headword:
-

Relevant legal provisions:
EPC Art. 56, 83
EPC R. 71(2)

Keyword:
"Disclosure of invention - yes"
"Inventive step - yes"

Decisions cited:
T 0192/82

Catchword:
-

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Case Number: T 0996/00 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 24 November 2004

Appellant: (Opponent)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 3 July 2000 rejecting the opposition filed against European patent No. 0508609 pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: M. Ceyte
Members: M. Hatherly
H. Preglau

Summary of Facts and Submissions

I. The opposition division's decision to reject the opposition against European patent No. 0 508 609 was posted on 3 July 2000.

On 1 September 2000 the appellant (opponent) filed an appeal and simultaneously paid the appeal fee, filing the statement of grounds on 9 November 2000.

II. Claim 1 as granted reads:

"A family of modular solid-propellant launch vehicles, each launch vehicle comprising:

a lower stage of one or more large modular solid propellant rocket motors (10) clustered together, each large rocket motor (10) having a weight of approximately 50,000 Kg to 56,700 Kg (110,000 to 125,000 pounds), a vacuum specific impulse of approximate 260 to 290 seconds and an action time of approximately 58 to 90 seconds; and
an upper stage of one or more small modular rocket motors (12) clustered together and mounted on the lower stage, each small rocket motor (12) having a weight of approximately 7,700 Kg to 22,700 Kg (17,000 to 50,000 pounds), a vacuum specific impulse of approximately 270 to 305 seconds and an action time of approximately 60 to 130 seconds."

II. The following documents were newly cited and/or referred to in the appeal proceedings:

12 "La grande aventure de l'espace", Editions Rombaldi, 1967, cover page, unnumbered page supposed to be 53, and page 89

15 "Conestoga Launch Vehicles", Mark Daniels and James E. Davidson, pages 11-8 to 11-13 and 11-16, undated

A1 "Conception générale des systèmes spatiaux conception des fusées porteuses", F. DURET and J. P. FROUARD, 1983, pages 135 to 145, 161 to 177 and 2.1 to 2.6 of Annex 2

A2 "L'Espace en heritage", André LEBEAU – edition Odile Jacob, 1986, second and third contents pages and pages 392 to 432

A3 "Conception des véhicules spatiaux", Daniel MARTY, 1986, Masson, contents pages VI, VII and VIII and pages 50 to 78

A4 "Encyclopédie soviétique de l'astronautique mondiale", V. P. Glouchko, Editions Mir, Moscou, 1971, page 173

A5 "Traité des fusées cosmiques", Constantin Edouardovich TSIOLKOWSKI, CCCP, 1934, pages 135 to 159, in Russian

A5T Translation into French of a large part of A5, consisting of a certificate of translation and pages 1 to 17

D1 "interavia Space Directory 1990-1991", edited by Andrew Wilson, Jane's Information Group, Launchers, pages 202 to 327

D2 "Flight Opportunities for Small Payloads", European Space Agency ESA SP-298, First European Workshop 8 to 10 February 1989, Esrin, Frascati, Italy, cover page, pages 149 to 180, Table of Contents, Index of Keywords, List of Participants

D3-2 "Peacekeeper 1", Internet page, Encyclopedia-Astronautica, copyright Mark Wade, 1999

D3-3 "Castor 120", Internet page, Encyclopedia-Astronautica, copyright Mark Wade, 1999

P1 to P30
Annex 2 to the statement of grounds of appeal includes passages which have been numbered P1 to P30 by the board, most of these passages being from prior art documents A1, A2, A4 and D2

US-A-3 093 964 (cited in the present European patent)

III. The parties were summoned to oral proceedings which took place on 24 November 2004 with the appellant present. The respondent (proprietor) had announced by letter of 18 November 2004 that he would not attend the oral proceedings which, in accordance with Rule 71(2) EPC, took place without him.

IV. In the appeal proceedings the appellant argued that the patent should be revoked for lack of inventive step and because of lack of disclosure of the invention.

The respondent argued in writing that the invention provided a launch vehicle comprising a lower stage having a large solid propellant rocket motor and an upper stage having a small solid propellant motor. He stated that the closest prior art was not the general knowledge of the person skilled in the art. He maintained that at the priority date no motor having the characteristics of the claimed large motor had been known and that in fact only the Hercules GEM strap-on was to be considered as prior art. Starting from this small motor the problem was to provide a lower stage and a large modular solid propellant rocket motor for a launcher. This problem and its solution were apparent from the description of the patent. He added that the appellant's argument that the person skilled in the art would use existing engines rather than designing new ones was an argument confirming an inventive step.

V. The appellant requested that the decision under appeal be set aside and the patent revoked.

The respondent requested in writing that the appeal be dismissed i.e. that the patent be maintained as granted.

Reasons for the Decision

1. The appeal is admissible.

2. *Interpretation of claim 1*

2.1 Section 2.1.2 of the respondent's letter of 16 May 2001 states that "The solution provided by the patented invention is for a launch vehicle comprising a lower

stage having a large solid propellant rocket motor and an upper stage having a small solid propellant motor."

It is clear that, if the independent claim of the present patent indeed did read along these lines and e.g. merely specified the weight range of each of the large and small motors, then it would be anticipated by a single prior art launch vehicle having a single large motor whose weight fell in the respective claimed range and a single small motor whose weight fell in the respective claimed range.

2.2 However, in section 9 of the communication accompanying the summons to oral proceedings the board pointed out that the present claim 1 specified not a single launch vehicle but a **family** of **modular** launch vehicles with large and small **modular** motors, and that the respondent might need to explain how the claimed family differed from a single launch vehicle.

The respondent did not reply to the communication but the board nevertheless wishes to comment on the term "family".

2.3 The word "family" signifies a group of a plurality of members (one member is not a family). The members are different one to the other but make up a family because they have common features.

The common features of the launch vehicles of the family of claim 1 are the motors and the modularity. The launch vehicles and the motors are modular to facilitate the use of the same motors throughout the family.

2.4 Claim 1 states that the large rocket motor has a weight of approximately 50000 Kg to 56700 Kg. This does not mean that if a launch vehicle has three large motors that each of these three motors could have a different weight e.g. 51000, 52000 and 53000 Kg respectively.

On the contrary, it is clear from the context of the patent that all the large motors of the stage and indeed of the family are the same, and all the small motors are the same. The purpose of the family is to be able to launch different payloads into different orbits not by changing the size of the motors but by changing the number of the same large motors and the number of the same small motors (and sometimes by adding strap-on motors). Thus column 5, lines 20 to 22 of the patent states that there are "only two sizes of modular solid-propellant rocket motors, a large rocket motor 10 and a small rocket motor 12."

2.5 Claim 1 states that the lower stage has one or more large motors clustered together. The term "family" in the claim, the modularity of the launch vehicles and the purpose of the family imply that both alternatives (i.e. one large motor and a plurality of large motors) are catered for in the family, i.e. that the claimed family includes at least one vehicle with a single motor in the lower stage and at least one vehicle with a plurality of motors in the lower stage. This also applies correspondingly for the upper stage.

2.6 As stated in sections 10.3 and 10.4 of the communication accompanying the summons to oral proceedings, there is a difference between a lower

stage and a first stage and there is a difference between an upper stage and a second stage. The present claim 1 specifies "a lower stage … and an upper stage … mounted on the lower stage". Thus the present claim is **not** directed to launch vehicles where the first stage surrounds and is at the same height as the second stage.

2.7 The first paragraph of the appellant's letter of 7 October 2004 argues that the purpose of the patent is, despite the fact that the proprietor is not the possessor of a patent on the 53000 kg motor, to reserve the use of the 53000 kg motor for himself.

Indeed, the appellant argues on page 7 of the annex to the letter of 7 October 2004 that whoever used a lower stage whose weight is between 50000 and 56700 Kg will use an upper stage whose weight is between 7700 and 22700 Kg. The appellant concludes that the weight limits for the small motor are aimed at protecting any use of a motor between 50000 and 56700 Kg.

Regarding these objections and related objections in the annex to the letter of 7 October 2004, the board stresses that what is claimed is not the large motor or its use per se but a family of launchers, each launcher of which must use at least one such large motor.

3. *Disclosure of the invention*

3.1 The appellant argues that the disclosure of the patent is insufficient to build a family of launch vehicles as defined by the claims and in particular by claim 1 (Articles 83 and 100(b) EPC), and that the description does not reveal the conceptual link between an

objective technical problem which remains to be identified and the solution proposed by claim 1 (Rule 27(1)(c) EPC). He maintains that, even if it were admitted that the skilled person using only the information in the patent would know how to construct a launch vehicle satisfying claim 1, this would not mean that he would have identified a technical problem and would know how to put it into relationship with the characteristics of the launch vehicle described in claim 1. An exercise book of technical requirements of a product (which often results from commercial considerations) should not be confused with a technical problem.

3.2 The parties and the board agree that a motor corresponding to the small motor of claim 1 was known per se at the priority date, see the Hercules GEM solid strap-on on page 274 of D1. Moreover the ranges of vacuum specific impulse specified in claim 1 were conventional for propergol motors, see lines 23 to 26 of column 2 on page 173 of A4, and the claimed ranges of action times were conventional. Families of multi-stage launch vehicles were known, see e.g. D2, pages 156 and 157.

3.3 The appellant's arguments centre however on the large motor. He accepts that the theoretical value of the weight of the claimed large motor was not beyond the scope of the normal procedure of the skilled person and that the skilled person could theoretically have considered a motor of this weight. However the appellant questions whether it would have been possible to construct this large motor since it was not known at the priority date. He argues that the skilled person

would only set about constructing a large motor in the claimed weight range if there was a reasonable chance of achieving success with reasonable effort within a reasonable time. If the skilled person were merely given the engine parameters then, to design it, he would be launched into an expensive time-consuming adventure with no guarantee of success. The skilled person would therefore prefer to use a plurality of smaller motors.

The board considers that it is clear to the skilled person that the development costs for a launch vehicle family will be high, that the project will take considerable time and that there will be a risk of failure. However these disadvantages have always been present in space projects but have not deterred development towards larger launch vehicles.

Documents D3-2 and D3-3 report first flights in 1994 (by another company) of motors of 48960 and 53118 Kg respectively. Although not prior art documents, D3-2 and D3-3 were cited by the appellant who thereby implicitly accepts their content as being correct. Development of these motors would of course had to have begun well before the first flights. Thus the board finds both the appellant's argument that the skilled person would not have embarked on the development of the claimed large motor in 1991 and the appellant's doubts that the skilled person would not have been able to construct a 50000 to 56700 Kg motor in 1991 to be unfounded.

3.4 The board therefore finds that the person skilled in the art would know how to construct a large motor and a

small motor such that each satisfies the respective specification of weight, vacuum specific impulse and action time set out in claim 1.

Of course, merely constructing large and small motors does not result in the family of launcher vehicles defined by claim 1.

It is worth pointing out that the person skilled in the art when considering disclosure of an invention is more fortunate than the person skilled in the art when considering inventive step since the former has the patent to help him whereas the latter does not.

Thus the person skilled in the art has the help of the patent to tell him to combine these motors in a particular way (e.g. Figure 1 of the patent shows a family of launch vehicles comprising various combinations of lower stage large rocket motors 10 and upper stage small rocket motors 12).

3.5 The appellant argues that there is no description in the patent of a technical problem associated with a difference in conception over the known state of the art.

The definition of the problem solved by the invention will depend of course on which prior art disclosure is held to be the closest, see section 5 below. However it is already clear from page 1, line 13 to page 2, line 22 of the application as originally filed and column 1, lines 5 to 22 and 49 to 52 of the patent that the invention aims to launch different payloads into different orbits, not by providing totally different

launch vehicles each time but by using a family of launch vehicles with common motors, thus reducing cost and time and increasing reliability.

3.6 The appellant concludes from his calculations on pages 8 and 9 of annex 1 to the statement of grounds of appeal that a launch vehicle with a single large motor and a single small motor is insufficiently powerful to put into orbit any of the payloads specified in the description of the patent.

However the claimed launch vehicle need not have only a single large motor and a single small motor. It is clear that the numbers of the motors are chosen such that the resultant launch vehicle is powerful enough to launch the required payload into the required orbit.

3.7 The appellant questions the credibility of the patent, saying it is full of faults e.g. in the acknowledgement of US-A-2 515 048 in lines 23 to 25 of column 1 which is not in fact a single stage launch vehicle.

However it is common that a patent specification contains errors but this need not mean that the skilled person is always seriously disadvantaged thereby. He knows to weigh up information and discard that which makes no sense. For example, he would recognise and immediately correct the error in the acknowledgement of the prior art document noticed by the appellant.

3.8 In section 1-3 of his letter of 20 September 2004 the appellant argues that there is no particular embodiment of the originally filed claim 2 which is now the granted claim 1 with at least one value in each range

given in the claim. However the board considers it self evident for the skilled person to use a value in the middle of each range.

3.9 The appellant then argues in section 1-4 of the same letter that the patent gives only the total weights of the motors but, when calculating motor weights and combustion times, it is necessary also to know the motor weight to propergol weight (the constructive coefficient). However sections 2-6 and 2-7 of the same letter (this time dealing with inventive step) are an implicit admission by the appellant that the skilled person will know this.

3.10 The appellant's letter of 7 October 2004 is accompanied by calculations of accelerations and combustion times in different launcher configurations having the claimed weights of the large and small motors. The appellant says that, despite a large number of calculations, it is impossible to find launchers having at the same time the claimed weights and the claimed combustion times, and that the information in the patent is insufficient to permit the skilled person to associate an orbit and a useful weight with a launcher corresponding to the criteria of the invention.

However some of these calculations assume that a single small motor with a weight in the claimed range is used for the upper stage and a single large motor with a weight in the claimed range is used for the other stage or stages. It is clear on the other hand that the launchers of the claimed launcher family can have varying numbers of each type of motor. The skilled person can select these numbers to satisfy his

requirements. The resultant launchers may not always be optimal but this is the acceptable price to be paid for using standardised components.

Lines 7 to 10 on page 9 of the annex to the letter of 7 October 2004 state that the skilled person does not find instructions in the patent for determining, for a weight and an orbit, a launcher corresponding to the criteria of the claim. However even if this argument is accepted then the appellant accepts in lines 10 and 11 of the same page that the skilled person would be led to do this using his general knowledge.

3.11 Consequently the board finds that the patent satisfies the requirements of Article 83 and Rule 27(1)(c) EPC.

4. *Novelty*

None of the prior art documents on file discloses all the features of claim 1 as granted. Moreover lack of novelty has never been alleged in the opposition and appeal proceedings.

The board thus finds the subject-matter of claim 1 novel (Articles 52(1) and 54 EPC).

5. *Inventive step*

5.1 In the appellant outlines what he considers to be the general knowledge of the skilled person, referring to annex 2 to the statement of grounds of appeal which contains inter alia quotations from prior art documents A1 to A4 and D2. He argues in section 4 1 of annex 1 to the statement of grounds of appeal that it needs to be

determined whether the skilled person could have arrived at the claimed launch vehicles merely using his general knowledge.

As stated in section 8 of the communication accompanying the summons to oral proceedings, for an objective assessment of inventive step, it is established EPO practice to determine the closest prior art to the claimed invention, see e.g. section I.D.3.5 of the "Case Law of the Boards of Appeal of the European Patent Office (pages 104 and 105 of the Fourth Edition in English of 2001). The starting point is neither the prior art nor the close prior art, it is the closest prior art and this is neither a generalisation of a particular prior art item nor a mosaic of particular prior art items.

5.2 In sections 4 2 and 4 3 on page 10 of annex 1 to the statement of grounds of appeal the appellant refers to decision T 192/82 whose section 18 states that "Whenever an invention resides in the modification of a known article in order to improve its known capability, the modifying feature must not only characterise the invention in the claim, i.e. distinguish it from the prior art, but must contribute causally to the improvement of the capability thereby achieved. Thus, if no property implying a new use is involved, the onus is on the applicant to make the improvement credible, if necessary with evidence, as long as said improvement is still unexpected in the light of the state of the art."

The appellant argues this also applies in the present case because one does not know where there might be a

possible improvement brought by the invention and one cannot see what new teaching could be drawn from the patent for a new use of the invention. He adds that, if one gives other values to define an exercise book of technical requirements of a launcher or a family, one cannot see how to transpose a possible teaching of the invention to the conception of another family of launchers.

However at this point in annex 1 to the statement of grounds of appeal the appellant has not identified the closest prior art. In the immediately preceding section 4 1 he has referred to the skilled person's general knowledge. Thus the appellant is not arguing in the framework of the closest prior art but only in general terms. Although decision T 192/82 refers to "the modification of a known article" and "the modifying feature", the appellant has not identified what the known article is and so also has not identified what the modifying feature is.

5.3 The board stresses that it is of paramount importance when examining inventive step to determine the closest prior art. Throughout the appeal proceedings the appellant proved reluctant to commit himself to any particular prior art disclosure as being the closest.

5.4 At the top of page 11 of annex 1 to the statement of grounds of appeal the appellant argued that the various families of launchers cited in the notice of opposition and/or in P18 to P23 and P26 to P30 differed from those defined by claim 1 only by the weights of their motors and their times of combustion.

However, as pointed out in section 10 of the communication accompanying the summons to oral proceedings, P18 to P22 do not disclose solid-propellant rocket motors. P23 mentions solid-propellant motors but teaches against using them for the motors discussed in P18 to P22. While the Conestoga II and IV launch vehicles disclosed in P26 to P28 (i.e. D2, pages 156 and 157) seem to be a family of launchers (see the remark "Common Design Base" on Figure 4) with solid propellant motors, the first stage motors **surround** the second stage motor instead of there being "an **upper** stage … mounted on the **lower** stage". Moreover P26 to P28 do not disclose the weight, vacuum specific impulse and action time of the two types of motors.

The appellant added that the differences over the prior art are explained by the different objectives pursued and by progress in motor technology. The board does not disagree with this viewpoint but still does not see a complete and logical chain of reasoning of why the skilled person would start from any one of these cited arrangements and proceed to the family of launchers defined by claim 1.

5.5 In section 5 of annex 1 to the statement of grounds of appeal the appellant argues that the skilled person starts from existing motors and that the skilled person in the field of launchers is not the skilled person in the field of motors. The appellant continues that, if motors such as those defined in claim 1 exist, then the person skilled in the art will take them into consideration and it will be routine for him to use them.

However the board considers that the skilled person in the field of launchers will have knowledge both of launchers and also of motors. Moreover the appellant has not shown that large motors such as those defined in claim 1 did in fact exist. Indeed it is the basis of his objection of lack of disclosure (see section 3 of this decision) that the large motor did not exist.

5.6 On page 2 of the annex 1 to the letter of 6 February 2002 the appellant states that he does not accept the opposition division's choice of closest prior art, namely the Hercules GEM solid strap-on on page 274 of D1. However he maintains that the fact that this motor is a strap-on motor does not prevent it being used as a main motor for the upper stage and moreover that claim 1 does not specify that the small motor must be the main motor of the upper stage.

The board agrees with the appellant that the Hercules GEM solid strap-on is not the closest prior art to the present invention but cannot see how the appellant's arguments contribute towards showing that the skilled person would proceed from the Hercules GEM solid strap-on in an obvious manner to the family of launchers defined by claim 1.

The appellant attempts to explain this in his letter of 20 September 2004, in particular in sections 2-9 to 2-11. Starting with the Hercules GEM solid strap-on as an upper stage the skilled person would add two lower stages, each with a single large motor of the same weight. For a given payload and orbit, the routine calculations set out the accompanying table would show

him that each large motor would need to have a weight of at least just over 50000 Kg.

However the board considers that there would be other ways to launch the desired payload into the desired orbit, namely by using not one large motor of 50000 Kg in each of the lower stages but by using a plurality of smaller motors. Indeed, in the oral proceedings the appellant referred to the space shuttle where a plurality of small motors were used to achieve a quicker and cheaper space shuttle development.

Further the appellant has not commented on how the skilled person would arrive at the **family** of launch vehicles defined by the present claim 1.

5.7 The appellant refers on page 5 of the annex 1 to the letter of 6 February 2002 to page 53 of document 12 stating that if the state of the art or the deadlines do not allow the construction of a rocket of the desired thrust then one can use several smaller rockets.

The approach in the present patent of providing a large motor which is larger than those hitherto known is the opposite approach to that set out in document 12 which therefore leads away from the present invention. Although the appellant discusses the technical and commercial reasons why the skilled person would choose either smaller rockets which are on the market or larger rockets which need to be designed and constructed, he argues in general terms without a concrete starting point.

5.8 Thus he maintains on page 6 of the annex 1 to the letter of 6 February 2002 that the closest documents to the invention are those in which the launcher is composed of lower and upper stages, the lower stages comprising motors of the same weight or more weight than those of the upper stages but at this point he does not cite specific documents and still less the closest such document.

The large number of background documents he cites and discusses, and the 22 pages of calculations attached to the letter of 6 February 2002 and explained in annexes 1 and 2 to that letter, do not change the basic defects of his inventive step argumentation that leaves unanswered the important questions of precisely where the person skilled in the art starts and precisely how he would proceed to the subject-matter without being inventively active.

5.9 The oral proceedings gave the appellant a further opportunity to identify the closest prior art.

5.10 He first took US-A-3 093 964 (cited in column 1, line 26 of the present patent) and argued that the only difference brought by the present invention was the weight of the motors.

However while the citation speaks in column 2, line 21 of rockets (i.e. in the plural) there is no disclosure of constructing **different** rockets to make a **family** of rockets. Moreover the inner and outer units 12 and 14 are not upper and lower stages (see section 2.6 above). The board cannot see that the skilled person would

proceed in an obvious way from the teachings of this document to the subject-matter of claim 1.

5.11 The appellant then referred to the Conestoga launch vehicles disclosed on pages 156 and 157 of D2.

These seem to be a family of launchers (see the remark "Common Design Base" on Figure 4) with solid propellant motors. The main motors are however the same and their weight is unspecified. Moreover the first stage motors **surround** the second stage motor instead of there being "an **upper** stage … mounted on the **lower** stage" (see section 2.6 above).

Nevertheless as this is a **family** of launchers it is closer to the present invention than single launchers and will be taken as the closest prior art. The problem arising therefrom, formulated in such a way that it does not give clues to the solution, is to arrive at a design for the family that lowers the costs for launching various payloads. The solution is essentially to provide two different sizes of main motor, each having the characteristics specified in the claim.

The appellant argues that the skilled person would start from the Conestoga launcher of D2 and arrive in a routine manner at a design for a launcher for example as set out in line 13 on page 2 of annex 2 to the appellant's letter of 7 October 2004, namely with stage weights of 14792, 51261 and 177637 Kg respectively. The skilled person would then look to see if motors with weights of 14792, 51261 and 177637 Kg existed. If they did then he would use them, if not he would use a cluster of smaller motors. Therefore the appellant

concluded that the skilled person would arrive at a member of the claimed family without being inventive.

The board cannot support this argument. As no motor of 51261 Kg existed at the priority date of the patent, the skilled person, following the appellant's argument, would have used a cluster of smaller motors for the second stage and so would not have arrived at a member of the claimed family. Moreover, as the Conestoga stages use the same main motor, the skilled person would not be given the idea of combining two sizes of modular motors.

5.12 Document 15 cited in the opposition proceedings also concerns Conestoga launch vehicles. However, as pointed out in section 1 of the communication accompanying the summons to oral proceedings, this document is undated and it has not been proved that it was available to the public at the priority date of the present patent. Thus document 15 will not be further considered.

5.13 The appellant then referred to the Amroc launch vehicles described on page 150 of D2.

However the Amroc launch vehicle have hybrid motors and the board cannot see why the skilled person would start from such launch vehicles when wishing to provide solid propellant motors. Moreover there is no clear teaching of using two types of main motor as specified in claim 1 because e.g. the last sentence of the first paragraph of section 2.4 on page 150 of D2 states that the **same** motor is used for the first and second stages.

5.14 The board thus cannot see that any of the prior art documents relied upon in the appeal proceedings (taken singly or in combination) would lead the skilled person in an obvious manner to the subject-matter of claim 1.

The board thus finds that the subject-matter of claim 1 is not obvious (Articles 52(1) and 56 EPC).

6. Thus claim 1 is patentable as are claims 2 to 8 which are dependent thereon. Accordingly the patent can be maintained unamended i.e. as granted.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis M. Ceyte