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**Datasheet for the decision
of 7 September 2009**

Case Number: T 0484/08 - 3.5.03

Application Number: 99125016.8

Publication Number: 1014248

IPC: G05G 1/10

Language of the proceedings: EN

Title of invention:
Improved safety handwheel

Applicant:
Marini Cipriano S.R.L.

Opponent:
-

Headword:
Improved safety handwheel/MARINI CIPRIANO

Relevant legal provisions:
EPC Art. 54
RPBA Art. 12(2), 13(1)

Relevant legal provisions (EPC 1973):
EPC Art. 14(2)

Keyword:
"Novelty (second and third auxiliary requests) - no"
"Admissibility (main request, first and fourth auxiliary requests) - no"

Decisions cited:
-



Case Number: T 0484/08 - 3.5.03

D E C I S I O N
of the Technical Board of Appeal 3.5.03
of 7 September 2009

Appellant: Marini Cipriano S.R.L.
Via G. Verdi, 9
I-21020 Crugnola di Mornago (Varese) (IT)

Representative: Cicogna, Franco
Ufficio Internazionale Brevetti
Dott.Prof. Franco Cicogna
Via Visconti di Modrone, 14/A
I-20122 Milano (IT)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 15 October 2007
refusing European application No. 99125016.8
pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: A. S. Clelland
Members: A. J. Madenach
R. Menapace

Summary of Facts and Submissions

- I. The present appeal is against the decision of the examining division to refuse application No. 99125016.9 on the ground of lack of novelty (Article 54 EPC).

The examining division based their decision inter alia on

D3: US 2 523 458 A.

The following document was also mentioned in the decision:

D6: BE 540 940 A.

- II. In a notice of appeal and subsequently filed grounds of appeal the grant of a patent on the basis of the sets of claims of a main request and an auxiliary request was requested. As an auxiliary measure oral proceedings were requested.
- III. In a communication accompanying a summons to oral proceedings the board gave a preliminary opinion with respect to the sets of claims then on file.
- IV. In response to the board's communication the appellant filed with a letter of 7 August 2009 claims of a new main request and first auxiliary request. In a subsequent letter of 20 August 2009 the claims according the previous main and first auxiliary requests filed on 11 September 2007 and 14 February 2008, respectively, were renumbered as second and third auxiliary requests.

V. During oral proceedings on 7 September 2009, the appellant submitted a fourth auxiliary request and requested the grant of a patent based on either the main or one of the first to fourth auxiliary requests.

At the end of the oral proceedings, the chairman announced the board's decision.

VI. Independent claim 1 according to the main request reads as follows:

"An improved safety hand-wheel made as a single piece and comprising an annular contoured perimeter (2, 12), and a plurality of angularly equispaced spokes (3), having an anatomic configuration, characterized in that said single piece forming said hand-wheel (1, 10) is a pressed single piece, formed in a way that parts of a sheet-like material are bent to the rear side of said handwheel and thus form an at least approximately hollow structure as said annular contoured perimeter."

Independent claim 1 according to the first auxiliary request reads as follows:

"An improved safety hand-wheel made as a single piece and comprising an annular contoured perimeter (2, 12), and a plurality of angularly equispaced spokes (3), having an anatomic configuration, characterized in that said single piece forming said hand-wheel (1, 10) is a pressed single piece, and wherein said spokes (3) and annular perimeter (2, 12) provides [sic] several crowned and anatomic surfaces (7), each of which perimetrally delimits each said opening (6, 16) and

wherein said surfaces (7) are formed from bent sheet-like material."

Independent claim 1 according to the second auxiliary request reads as follows:

"An improved safety hand-wheel (1, 10) comprising an annular contoured perimeter (2, 12), and a plurality of angularly equispaced spokes (3) each pair of said spokes defining an opening (6, 16) therebetween, characterized in that said safety hand-wheel is made as a single piece, that said openings defined by each said pair of said spokes are throughgoing openings (6, 16) and that said spokes and annular perimeter have an anatomic configuration, providing several crowned and anatomic surfaces (7), to be gripped by the hands of a user for manually operating said safety hand-wheel."

Independent claim 1 according to the third auxiliary request reads as follows:

"Safety hand-wheel (1, 10) comprising an annular perimeter (2, 12) and a plurality of angularly equispaced spokes (3) connecting the annular perimeter (2, 12) to a central region (4) for mounting the hand-wheel (1, 10) to a driving rod element, characterized in that each pair of said radially extending spokes (3) delimits, together with said annular perimeter (2, 12), a throughgoing opening (6, 16) perimetrically delimited by crowned surfaces (7) provided on said spokes (3) and on the inner side of said annular perimeter (2, 12) such that the opening (6, 16) has an anatomic inner contour easily to be gripped by the fingers of a user,

the annular perimeter (2, 12) of the wheel (1, 10) made as a single piece having a smooth outer surface."

Independent claim 1 according to the fourth auxiliary request reads as follows:

"An improved hand-wheel (1, 10) comprising an annular contoured perimeter (2, 12), and a plurality of angularly equispaced spokes (3) each pair of said spokes defining an opening (6, 16) therebetween, characterized in that said safety hand-wheel is made as a single piece and that said spokes and annular perimeter provide several crowned and anatomic surfaces."

Reasons for the decision:

1. *Main request and first auxiliary request: Corrected translation, Article 14(2) EPC 1973:*
 - 1.1 Article 14(2) EPC 1973 relates to applications filed at the EPO by a natural or legal person having their residence or principal place of business within the territory of a Contracting State having a language other than English, German or French. Such applicants may file an application at the EPO in the official language of that Contracting State, but then need to file a translation into an official language of the EPO. In the present instance, the appellant made use of this provision and filed the original application in Italian which was then translated into English.

- 1.2 Article 14(2) EPC 1973 states that "throughout the proceedings before the European Patent Office, such translation may be brought into conformity with the original text of the application".

With letter of 7 August 2009 the appellant requested that the term "molding" as used in the original application at column 3, lines 9-10 be replaced by "pressing" as a more appropriate translation of "operazione di stampaggio" in the original Italian application.

- 1.3 The board has not found it necessary to decide on the question of whether "pressing" is a more appropriate translation for "operazione di stampaggio" than "molding", in the light of the other deficiencies in the claims of these requests. The following decision is, with respect to the main and first auxiliary requests, based - *arguendo* - on the premise that "pressing" is the more appropriate translation.

2. *Main request and first auxiliary request: Admissibility*

- 2.1 Article 12(2) of the Rules of Procedure of the Boards of Appeal stipulates that "the statement of grounds of appeal ... shall contain a party's complete case". According to Article 13(1) of the Rules of Procedure of the Boards of Appeal "any amendment to a party's case after it has filed its grounds of appeal ... may be admitted and considered at the Board's discretion".

In the exercise of discretion as regards the admission of requests by the appellant after the filing of the statement of grounds, established Board case law is

that the crucial criteria are - *inter alia* - whether or not the amended claims of those requests are prima facie allowable and whether or not those amended claims give rise to fresh issues.

- 2.2 Claim 1 of both the main request and the first auxiliary request, which were filed shortly before the oral proceedings, introduce new terms, referring for example to a "sheet-like material" which is "bent" and has an "at least approximately hollow structure" (the latter only in claim 1 according to the main request). The board cannot find any explicit basis in the original disclosure supporting these features.

The appellant argued that, since the claimed hand-wheels are made by pressing, the skilled person would interpret Figure 2 of the patent application, which shows the rear view of a hand-wheel according to the invention, such that the double lines which run along the annular hand-grip correspond to the opposing edges of a sheet-like material pressed to form a hollow structure which constitutes the peripheral grip of the hand-wheel, *i.e.* the "annular contoured perimeter". A model corresponding to the Figure was presented.

Once it had viewed the model, the board was able to interpret Figure 2. However, prior to seeing the model, the board was not able to derive from the Figure the information that the hand-wheel was formed of a single piece of sheet-like material bent to form a hollow structure. There is no reference in the description to the use of a sheet-like material, nor does the reference to a "pressed single piece" imply that a sheet-like material has to be used. For example

thermoplastic plastics, a material not excluded by the claim, can be a bulk material rather than a sheet-like material and can be pressed into form without forming any hollow structures. The double lines shown on the perimeter of the hand-wheel in Figure 2 could then be interpreted as ridges or grooves.

- 2.3 As a consequence, the board finds that the amendments introduced into claim 1 of the main and first auxiliary requests have no basis in the original application, contrary to the requirements of Article 123(2) EPC.

Claim 1 of the main and first auxiliary requests therefore give rise to new issues for which reason they are not *prima facie* allowable.

They are therefore not admitted into the procedure.

3. *Second and third auxiliary requests: Amendments - Article 123(2) EPC:*

- 3.1 The board fails to find an explicit disclosure for "throughgoing opening" in its most general meaning. This feature is, however, disclosed in the sense that a pair of spokes forms by definition a "throughgoing opening" between them. No disclosure for any wider interpretation of "throughgoing" can be found. The figures cannot be considered as providing such disclosure as they are only of a schematic nature and do not exclude parts of the wheels not explicitly shown occluding the openings between the spokes. It is also not clear through which part of the wheel the openings go. According to the board's understanding, the term only defines that the openings go through the spokes

but does not necessarily exclude the possibility of further parts of the wheel coming in the way of the opening. For the sake of argument, this feature will be interpreted in the sense that the openings go through the whole of the wheel, i.e. from the front to the rear of the wheel, with respect to the questions relating to novelty.

3.2 Similarly, there appears to be no explicit disclosure in the originally filed application for the feature "to be gripped by the hands (fingers) of a user".

3.3 Similarly, there appears to be no explicit disclosure in the originally filed application for the features "anatomic surfaces" and "anatomic inner contour", nor do these features have a clear meaning in the art (see point 4.2 below).

3.4 Nor could the board find any explicit disclosure for the feature "smooth outer surface" in claim 1 according to the third auxiliary request.

3.5 For the sake of argument, it is however assumed in the following that claim 1 of each of the second and third auxiliary requests complies with the requirements of Article 123(2) EPC.

4. *Interpretation of claim 1 of the second and third auxiliary requests (Article 84 EPC):*

4.1 It is not clear what distinguishes a "safety" hand-wheel from any other hand-wheel. The application states that the hand-wheel is to be operable under safety conditions, and has therefore to provide a very good

reliability (column 3, lines 27-33). It remains, however, unclear, which physical properties follow from this reference to "safety". The board accordingly concludes that claim 1 of the second and third auxiliary requests is not limited in scope by the reference to a "safety" hand-wheel.

4.2 The terms "anatomic configuration" as well as "anatomic surfaces" and "anatomic inner contour" have no exact meaning in the art. According to paragraph [0007] of the published application gripping cannot be considered anatomic if the hand-wheels cannot easily be used. The interpretation of "anatomic" in terms of ease of use is, however, a subjective one and of unclear limitative effect. For the sake of argument, this feature will be interpreted in the sense of "ease of use" with respect to the questions relating to novelty.

4.3 The term "crowned" is understood as meaning "convex".

5. *Second and third auxiliary requests: Novelty (Article 54 EPC):*

5.1 Although, as set out above, the claims arguably do not meet the requirements of Articles 123(2) and 84 EPC, the board is in a position to decide the question of novelty in relation to the claimed subject-matter when interpreted as set out above.

5.2 The board considers D6 as representing the closest prior art.

From this document is known a hand-wheel (page 1, lines 1-2: "volant à main") which is for operating

train brakes (page 1, lines 2-3) and as such qualifies as a "safety hand-wheel". The wheel comprises a rim 4 (page 3, last paragraph) which corresponds to the claimed annular contoured perimeter, and a plurality of angularly equispaced spokes 3 (loc. cit.). The wheel is made as a single piece (page 4, l. 18). From Figure 1 it follows that each pair of said spokes defines an opening therebetween, i.e. a "throughgoing opening" in the sense that they go between the spokes. It appears from Figures 1 and 2 that these openings go through the whole of the wheel as well, i.e. from the front to the underside of the wheel. The wheel disclosed in D6 is intended to give maximum comfort to the hand of an operator (page 2, lines 9-10) and to avoid bending of the wrist and a sliding grip on the wheel (page 4, lines 11-16). Its constituents, i.e. in particular the spokes and the annular perimeter can thus be said to have an anatomic configuration to be gripped by the hands of a user for manually operating said wheel and to provide anatomic surfaces. The known wheel comprises flanges 7 on the rim (page 4, lines 13-16 and drawings). Similar flanges can be seen in Figure 1 on the spokes. The presence of flanges allows the remaining parts of the rim and spokes to be considered as forming convex portions in relation to the flanges. The known wheel thus comprises crowned surfaces.

5.3 On such an interpretation D6 discloses all features of the wheel of claim 1 of the second auxiliary request, so that the claim lacks novelty, Article 54 EPC.

5.4 With respect to the feature "crowned surfaces" the appellant argued with reference to the model shown during the oral proceedings that the crowned or convex

surfaces should be understood as being portions protruding in the direction of the axis of rotation of the hand-wheel. The hand-wheel known from D6 did not show crowned or convex surfaces along this axis.

The board does not accept this argument. The wording of the claim does not give a clear indication as to the orientation of the crowned surfaces, nor does the description. The best one can say is that it follows from lines 5-7 of column 3 of the published application that each opening has a perimetrical anatomic contour owing to the crowned surfaces. This rather indicates that the crowned surfaces are formed along the perimeter of the openings which lies in the drawing plane of the corresponding Figure 2 and, thus, perpendicular to the axis of rotation.

5.5 Even if, for the sake of argument, the claim were to be interpreted as requiring parts of the rim and spokes to form convex portions along the axis of rotation, the board takes the view that the skilled person, faced with the problem of improving grip, would have found it obvious to form the rim and the spokes with convex surfaces, i.e. crowns. The subject-matter of claim 1 of the second auxiliary request would on such an interpretation be obvious to the skilled person starting from the teaching of D6 and applying common general knowledge.

5.6 Apart from some reformulation, claim 1 according to the third auxiliary request differs from claim 1 according to the second auxiliary request essentially by the provision of a central region for mounting the hand-wheel to a driving rod element and in that the annular

perimeter has "a smooth outer surface". The wheel known from D6 equally comprises a central hub region 1 and disk 2 (page 3, last paragraph and Figures 1 and 2) which, as is apparent from the Figures, are suitable for mounting the hand-wheel to a driving rod element. The outer surface of the wheel is also smooth (page 5, lines 7-9).

5.7 D6 thus discloses all features of the wheel according to claim 1 of the third auxiliary request. The third auxiliary request is, therefore, not allowable since the subject-matter of claim 1 lacks novelty or, on the alternative interpretation discussed above is obvious to the skilled person starting from the teaching of D6 and applying general common knowledge.

6. *Fourth auxiliary request: Admissibility*

6.1 Concerning the admissibility of the fourth auxiliary request, which was filed during the oral proceedings, the board applies the same criteria as indicated at point 2.1 above, i.e. whether the request is *prima facie* allowable and whether or not the amended claims give rise to fresh issues.

6.2 Although questions remain as to whether in particular claim 1 of the fourth auxiliary request meets the requirements of Articles 84 EPC as to clarity and/or 123(2) EPC as to added subject-matter, the board is in a position to interpret claim 1 of this request in order to permit an assessment of the claimed subject-matter with respect to novelty.

Claim 1 of the fourth auxiliary request is based on claim 1 of the second auxiliary request with several features removed, so that the claim is wider in scope than claim 1 of the second auxiliary request. As the subject-matter of claim 1 of the second auxiliary request is not novel (see points 5.2 and 5.3 above) this applies equally to the subject-matter of claim 1 of the fourth auxiliary request.

6.3 As a consequence claim 1 of the fourth auxiliary request *prima facie* does not fulfil the requirement of novelty (Article 54 EPC). The request not being *prima facie* allowable is thus not admitted.

7. As all of the appellant's requests are either inadmissible or unallowable the appeal cannot succeed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

A. Vottner

A. S. Clelland