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Datasheet for the decision of 26 March 2014

Case Number: T 1577/10 - 3.2.04

Application Number: 99921212.9

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IPC: A63B41/08, A63B41/00

Language of the proceedings: EN

Title of invention:
BALL GAME BALL

Patent Proprietor:
MOLTEN CORPORATION
adidas International Marketing B.V.

Opponent:
Mortex Limited

Headword:

Relevant legal provisions:
EPC Art. 123(2), 54, 56

Keyword:
Amendments - added subject-matter (no)
Novelty - (yes)
Inventive step - (yes) - reformulation of the technical problem
Claims - clarity in opposition appeal proceedings

Decisions cited:
T 0373/12, G 0009/91, G 0001/91, T 0301/87, T 0478/09, T 0589/09, T 1459/05, T 0459/09, T 0681/00, T 0409/10

Catchword:

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Case Number: T 1577/10 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 26 March 2014

Appellant: (Opponent)	Mortex Limited Rm 2811 Metroplaza Phase 2 223 Hing Fong Road Kwai Chung, Hong Kong (CN)
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Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 11 May 2010 concerning maintenance of the European Patent No. 1080745 in amended form.**

Composition of the Board:

Chairman: A. de Vries
Members: J. Wright
C. Heath

Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal, received 9 July 2010, against the interlocutory decision of the opposition division posted on 11 May 2010 on the amended form in which European patent no. EP-B-1080745 can be maintained. The appeal fee was paid on 19 July 2010. The statement setting out the grounds was received on 21 September 2010.

II. The opposition was filed against the patent as a whole and based on Article 100(a) together with Articles 52(1), 54 and 56 EPC for lack of novelty and lack of inventive step.

The opposition division held that the patent as amended met, *inter alia,* the requirements of Articles 84 and 123(2) EPC, and that the the grounds for opposition mentioned in Article 100(a) EPC did not prejudice maintenance of the patent as amended having regard to the following document, amongst others:

D6: FR-A-2 443 850

III. The appellant requests that the decision under appeal be set aside and that the patent be revoked.

The respondent (proprietor) requests that the appeal be dismissed, or, in the alternative, that the patent be maintained in amended form according to one of 5 auxiliary requests all filed during the opposition proceedings with letter of 12 March 2010.

IV. Oral proceedings before the Board were held on 26 March 2014.

V. The wording of claim 1 of the main request (as upheld by the opposition division) is as follows:
"A laminated ball (1) for a ball game, comprising an elastic bladder (2) having the form of a spherical hollow body, into which compressed air is charged, and a plurality of leather panels (6; 14), wherein a peripheral edge portion of the leather panel (6; 14) is folded toward an inside by about 90° or by about 180°, and a thickness adjusting member (10; 15) is bonded onto the back of the leather panel (6; 14) surrounded by the folded portion of the leather panel (6; 14) having a thickness so that the back of the leather panel (6; 14) is substantially a flat face, a reinforced layer (4) is formed on the whole surface of the bladder (2), to which the plurality of leather panels (6; 14) is bonded directly or through a cover rubber layer (5); and the leather panel (6; 14) is bonded in the butt joint with an adjacent leather panel wherein the folded portion (19) of the leather panel (6; 14) is bonded onto the folded portion (19) of the adjacent panel."

VI. The appellant (opponent) argued as follows:

With regard to Article 123(2) EPC: Claim 1 as maintained by the opposition division adds subject matter as butt joint is not mentioned for all embodiments in the application as filed, and because the final feature of bonding of the folded portions is only described in the application as filed in combination with 90° fold angle, while butt joint bonding (penultimate feature) is originally described only in conjunction with a 180° fold angle.

Regarding clarity: According to recent case law, the Board has the power under Article 101(3)a EPC to

examine the clarity of a feature added to an independent claim from a granted dependent claim. The fold angle feature is unclear as it is unclear how the angle should be measured.

Regarding novelty: D6 discloses all the features of claim 1 for the case where a peripheral edge portion is folded through about 90°. The last two features of claim 1, namely bonding of panels in a butt joint wherein the folded portions of adjacent panels are bonded to each other is implicitly disclosed in D6. The panels of D6 abut each other. In order to ensure adequate bonding of leather panels to the reinforced bladder of the ball, the skilled person would apply an excess of glue, which would squeeze outwards between abutting panels when placed in the mould as shown in figure 6, thereby bonding the folded portions of panels in a butt joint as claimed.

Regarding inventive step: In order to solve the problem of peeling of leather panels on the ball of D6, the skilled person would supply extra glue so that this oozed into the junction between panels, thereby bonding the panels as claimed. Furthermore, regarding the problem of preventing ingress of water into joints between panels, it is known to seal the stitched joints of leather panels of a traditional hand stitched ball. The skilled person would apply this teaching to D6, also for this reason he would ensure that an excess of glue is applied to the ball and that this glue is squeezed into the junction between panels during manufacture.

VII. The respondent (proprietor) argued as follows:

Regarding Article 123(2) EPC: Claim 1 is based on claims 1, 2, 3 and 4. Both embodiments mention joining panels in butt joints explicitly. Furthermore, in the case of the first embodiment (180°), the folded portion of the panel starts as soon as the fold starts so there is a basis in the original application documents for bonding the folded portions of adjacent panels as claimed for the 180° fold.

Regarding clarity: In accordance with established jurisprudence, for example T478/09 and T589/09 the Board normally does not have the power to examine clarity of features taken from granted claims. In any case the feature of the fold angle is clear.

Regarding novelty: The subject matter of claim 1 is novel with respect to D6 because D6 does not disclose the last two features of the claim that panels bond in a butt joint at the folded portions. There is neither explicit nor implicit disclosure in D6 of excess glue being used to glue the leather panels to the ball nor of this being squeezed into the junction between panels to form a bonded joint.

Regarding inventive step: The problem to be solved is to make a durable inflatable ball. There is no hint in D6 to bond panels together as claimed. During the manufacture of the balls according to D6, the material 17 shown in figure 6 flows into junctions between panels, not glue, therefore the skilled person would not arrive at the subject matter of claim 1 in an obvious manner.

Reasons for the Decision

1. The appeal is admissible.

2. Background of the invention

The patent is concerned with an inflatable ball for sports such as football. In particular it relates to a laminated ball, that is one made by gluing leather panels onto an inner ball body having an inflatable bladder, see specification paragraph [0003].

The invention's original idea was to make a laminated ball which has the same superior flight and gripping properties as a traditional hand stitched ball, see specification paragraph [0011]. A further aim was to prevent pealing of the panels and to prevent water from entering into joints between panels, see specification paragraph [0014]

To this end the laminated ball of claim 1 as upheld by the opposition division (main request) have leather panels with peripheral edge portions folded towards the inside by about 90° or about 180° and adjacent leather panels (6; 14) bonded in the butt joint between panels, the folded portion (19) of one panel being bonded to the folded portion of an adjacent panel.

3. Main Request

3.1 Added Subject matter, Article 123(2) EPC

3.1.1 Claim 1 as held allowable by the opposition division is based on claims 1, 2, 3 and 4 as filed with some additional amendments taken from the description. Original claim 2, which depended on claim 1 claimed the peripheral edge portion of the leather panel to be folded toward the inside by about 180°. Original claim 3, which depended on claim 1, similarly claimed folding but by about 90°. Original claim 4, which depended on claim 2 or 3, claimed "*the leather panel (6; 14) is bonded in the joint with the adjacent leather panel*". Vis-à-vis original claim 4, "joint" is now replaced by "butt joint". It is common ground that in the description of the first embodiment of the invention, with fold angle of 180°, the panels are bonded in a butt joint, see application as filed, page 10, lines 6 to 13 and figures 2 and 3.

3.1.2 The appellant disputes that there is a basis in the original application documents for butt joint bonding in conjunction with the second embodiment (figures 7 and 11 to 13) with fold angle of 90°.

This embodiment is described starting on page 13, line 15 in particular with reference to figures 7 to 13. In the original application, page 14, lines 9 to 14, the joint 7 shown in figure 7 is described as being "bonded together with the PU based adhesive or the like." The directly following sentence, page 14, lines 14 to 15 reads: "Consequently, water can be prevented from entering from a butt joint." Indeed the skilled person recognizes immediately the joint in figure 7 to be a “butt joint”, a term commonly used to denote the

simplest type of joint, namely one in which two elements are joined at their abutting ends or edges. The Board therefore does not doubt that the cited passages and the figures provide a clear and unambiguous basis for a butt joint in the context of the second, 90° fold angle embodiment.

3.1.3 The appellant has also disputed the finding of the decision (see reasons, section 5.3) that there is a basis for "folded portions" of adjacent panels being bonded for the first embodiment with fold angle of 180° (figures 2 to 6).

It is true that the wording of the final feature of claim 1 derives directly from the description of the second embodiment (page 15, lines 10-12). Furthermore, the term “folded portion” is used consistently throughout the application as filed, also in the context of the first embodiment, to denote the part of the panel that is folded under or down, cf. page 10, final two paragraphs and figure 3. However, that the skilled person's understanding of the term would exclude the region where the fold begins, the fold itself, and that he would understand the passage on page 15 to mean that bonding is exclusively in the unbent portion, beyond the actual fold, seems highly unlikely to the Board. The Board rather believes that the skilled person, who tries to read the description and figures just as he does claims, namely constructively, with a mind willing to understand, and so as to make technical sense of a teaching, cf Case Law of the Boards of Appeal, 7th edition 2013, II.A.6.1 for claim interpretation, gives the term and the passage a broader understanding. In such a broader understanding then, with the folded portion including the fold itself (the area where the material bends

round), the passage on page 15 also fits the first embodiment. Read in the overall context of panels bonded at a butt-joint, it conveys the information that panels bond where they are folded. This reading is entirely consistent with the bonding in the butt joint as the abutting edges have been formed by folding.

Therefore there is a direct and unambiguous disclosure of the butt joints being formed in the folded portion and thus no unallowable subject matter is added by claiming the folded portion is bonded onto the folded portion of the adjacent panel for the 180° fold case.

3.1.4 In the light of the above, the Board is satisfied that the version of claim 1 as held allowable by the division does not contain subject-matter extending beyond the content of the application as filed and therefore meets the requirements of Article 123(2) EPC.

3.2 Clarity, Article 84 EPC

3.2.1 The appellant has argued that the feature "a peripheral edge portion of the leather panel is folded toward an inside by about 90° or by about 180°" is unclear as such, and renders the claim unclear, Article 84 EPC.

3.2.2 The Board is aware of the current debate regarding the question whether and to what extent a board has the power under Article 101(3) EPC to examine clarity of amendments in opposition or a subsequent appeal made by a straightforward, literal combination of granted claims in correspondence with their dependency (see T373/12 of 2 April 2014 subsequent to the present decision and referring the question to the Enlarged Board). Whereas it was generally accepted that Article 101(3) EPC authorized the full examination of

amendments for compliance with the requirements of the EPC (cf. G9/91, reasons 19) and that this also included those of Article 84 EPC (but not those of Article 82, G1/91) the broad view hitherto was that this applied only to the extent that an amendment *introduced* a contravention of a requirement, cf. CLBA, II.A.1.4 and T301/87 (OJ EPO 1990, 335) cited therein, more recently T478/09 and T589/09. A differing view has emerged in recent case law, see in particular T1459/05, T459/09, T681/00, T1324/09 and T409/10. T1459/05, T1324/09 and T681/00 held that a Board may *exceptionally* examine such an amendment for clarity, for example if it prevents a meaningful assessment of patentability, or raises to prominence a contradiction previously hidden. Though T459/09 (followed by T409/10 without comment) considered such amendments to be substantial and thus in principle *always* open to examination for clarity, there also, the amendment in question brought to the foreground a contradiction between newly juxtaposed features when considered in the light of the description, which would not have been immediately apparent in the granted claims.

3.2.3 In the present case the relevant features concern the peripheral edge of the panel being folded toward an inside *by about 90°* or *by about 180°*, which literally repeats the wording of granted claims 2 and 3, each dependent on granted claim 1. Issue is taken with the term "about" and whether the angle should be measured at the middle of the panel or at the edge, meaning that alleged lack of clarity would be intrinsic to the wording of the features rather than arising from a sudden contradiction with other features. Granted claims 2 and 3 are moreover the next highest ranking claims after claim 1 and relate to the most distinctive feature of the two embodiments, the fold angle, and

thus can hardly be considered to have been hidden from view in the granted patent. Finally, this particular feature is not critical to the assessment of novelty or inventive step. Therefore, in so far the Board might have been inclined to follow this more recent case law (it is not) it finds that the exceptional conditions of the cited case law do not apply in the present case. Irrespective, the two fold angles distinguish the two embodiments as shown in the figures in a manner that the Board believes the skilled person with his mind willing to understand will be likely to understand with no undue effort. Prima facie therefore such a lack of clarity objection seems of little substance.

3.2.4 For these reasons the Board decided that it did not have the power under Article 101(3) EPC to examine the issue.

3.3 Novelty

3.3.1 Document D6 discloses a laminated ball having an inner inflatable bladder 1 to which a reinforcing layer 2 is attached (figure 1). The ball has leather panels 8, made by shaping pieces of leather in a bowl shape and provided with a thickness adjusting member to fill their concave back parts (page 1, lines 24-29; page 2, lines 2 to 4, figure 4). The leather panels are placed, one against the other on the pre-glued reinforced inflated bladder, so that it is completely covered by the leather panels (page 3, lines 25-38). It is thus common ground that D6 discloses a laminated ball having a plurality of leather panels, bonded to the reinforcing layer of the bladder and that their outer edges abut those of other panels. It is also common ground that D6 does not disclose panels having peripheral edge portions folded by about 180°.

3.3.2 Leaving aside the question as to whether or not D6 discloses leather panels having peripheral edge portions folded by about 90°, the question of novelty vis-à-vis D6 hinges on whether, as argued by the appellant, the leather panels 8 are bonded in the butt joint with an adjacent panel, wherein the folded portion of the leather panel is bonded onto the folded portion of the adjacent panel.

3.3.3 D6 contains no explicit statement that the abutted edges of the panels of D6 are bonded together, nor has this been argued. The Board therefore needs to consider whether there is an implicit disclosure of bonding where the panels 8 abut each other as the appellant has argued.

The jurisprudence relevant to implicit disclosure of features is reviewed in the Case Law of the Boards of Appeal, 7th edition, 2013 (CLBA), I.C.3.3, and the decisions cited therein. As with explicit disclosures, the standard applied is the direct and unambiguous disclosure of a feature. In this context "implicit disclosure" means disclosure which any person skilled in the art would objectively consider as necessarily implied in the explicit content.

3.3.4 The last two features of claim 1 require the leather panels to be bonded in a butt joint with an adjacent panel and the folded portion of the leather panel bonded onto the folded portion of the adjacent panel. This would be implicitly disclosed in D6, as the appellant has argued, because for the leather panels in D6 to bond as described there must be an excess of glue applied to the reinforced bladder. This would in turn imply that the glue must be liquid and is forced into

the junction between two panels during manufacture of the ball.

3.3.5 The way in which the leather panels are bonded to the reinforced bladder in D6 is described on page 3, lines 25 to page 4 line 3. Leather panels are applied to the reinforced bladder which is pre-glued: *"Les différents éléments 8 sont appliqués les uns contre les autres de manière à recouvrir la totalité de la surface du revêtement 10 de la vessie 1, le revêtement 10 étant préalablement encollé ou revêtu d'une matière permettant la soudure des éléments 8 soit à chaud soit à froid."* (page 3, lines 25 to 28). The appellant has argued that this means that an excess of liquid glue must be applied to the ball.

The Board disagrees. D6 is firstly silent as to the relative amount of glue applied, other than that it must cover the whole surface of the reinforced bladder. Furthermore, the panels would stick to the bladder if only sufficient glue were applied, rather than an excess thereof. Moreover, whether or not the glue might flow must depend on various factors, in particular its viscosity and how it interacts with the surfaces it is meant to bond. The glue could for example be of the type commonly used on rubbers rendering its surface tacky immediately prior to bonding, with no ability to flow whatsoever. Therefore there is no direct and unambiguous disclosure of an excess of glue being applied to the ball, nor that the glue is liquid when the panels are applied. Lastly, even if an excess of glue were applied and it were able to flow, it may be absorbed to more or less degree in the foamed material of the elastic filling of the panels (D6, page 3, lines 22 to 24 : “alvéolaire”), hindering further flow.

D6 goes on to indicate that, after application of the panels, the ball is placed in a mould 12, the inner wall of which comprises a layer of material 17 which is capable of flowing. The ball is then supplied with compressed air "*...de manière que les éléments soient comprimés contre la matière 17, celle ci grâce a ses qualités venant épouser tous les contours des éléments 8 pour assurer une liaison uniforme de ceux ci avec le revêtement 10*" (page 3, lines 34-38, figure 6). An air pressure force is therefore applied within the ball, which presses the panels between the bladder and the material 17. In reaction the flowable material 17 which is intended to surround each panel on all sides ("épouser tous les contours des éléments") exerts a counter force or pressure specifically to ensure a uniform bond between the panels and the bladder ("une liason uniforme de ceux-ci avec le revêtement").

No indication is given as to whether or not this force would result in any excess glue on the reinforced bladder being pushed up between the panels 8 where they abut. The only information given as to what might be between the panels is that, thanks to the qualities of the material 17 (the only material quality mentioned being that it can flow - "*fluable*"), the material 17 embraces all the contours of the panels 8. In other words, as a result of inflating the ball in the mould, the material 17 flows to fit around all the outer surfaces of the panels 8, as shown in figure 6. Thus the Board considers that, rather than any excess glue being forced between the panels 8 as the appellant would have it, if anything it is the material 17 and not glue which would be forced into the junction, forcing the sides of the panels 8 away from each other at the point where they abut each other.

In summary, the Board holds that there is no unequivocable disclosure of an excess of glue being applied to the ball, nor of the glue being in a liquid state when air is pumped into the ball whilst it is in the mould 12 (figure 6), nor finally of glue, rather than the material 17, entering the junction where panels abut. All of these conditions are necessary for the panels to be bonded as claimed.

From the above, the Board concludes that there is no direct and unambiguous disclosure in D6 of the conditions necessary for an implicit disclosure of adjacent panels being bonded in butt joints on their folded portions as claimed. Therefore the subject matter of claim 1 differs from D6 at least in respect of this feature and is thus new. Consequently the Board confirms the finding of the decision in this respect.

3.4 Inventive step

3.4.1 The appellant has challenged inventive step starting also from D6. Following on from the findings of the Board with respect to novelty of claim 1 as upheld, its subject matter is seen to differ from D6 at least in respect of the final two features of the claim, namely "...*the leather panel (6; 14) is bonded in the butt joint with an adjacent leather panel wherein the folded portion (19) of the leather panel (6; 14) is bonded onto the folded portion (19) of the adjacent panel.*"

3.4.2 Formulation of the objective technical problem

The original object of the claimed invention is set out in specification paragraph [0011] as realizing a laminated ball having the same flight, gripping

properties and ball controllability as a hand stitched ball. This original objective is similar to that stated in D6, see page 1, lines 20 to 23, which is to realize in an industrial manner a ball which has the aspect of hand stitched balls. This is in fact achieved by a laminate ball with the bonded panels forming V-shaped grooves similar to those of a hand stitched ball, and which give it the desired aspect. Such a ball most likely will also have similar improved grip, flight and ball controllability qualities as the ball of the present patent, which also relies on the presence of V shaped grooves. The Board therefore believes that D6 already goes a considerable way in achieving the main object of the present invention. It is therefore necessary to reformulate or refine the problem on the basis of associated effects of the claimed features in order to arrive at the objective technical problem addressed by the claimed invention in the light of the closest prior art, see CLBA, I.D.4.4.

Vis-à-vis D6, the two differing features of bonding of adjacent panels in the butt joint by bonding the folding portions is seen to have the effect that water is prevented from entering where the panels join while also preventing peeling of the panels, making the balls more durable, see specification paragraph [0015].

The associated objective technical problem can therefore be reformulated on the basis of these effects as follows: how to provide a laminated ball as in D6 which has similar properties to those of a hand-stitched ball, and which is water-tight and more durable.

3.4.3 The solution defined by the final two features of claim 1 as upheld is neither known or suggested by common general knowledge nor has any prior art been cited showing such a solution.

The Appellant has argued that these features would follow necessarily from the obvious application of an excess amount of liquid glue to ensure complete and uniform bonding of the panels, and so avoid peeling. It may be that D6 already recognizes the problem of peeling panels, see page 1, lines 13 to 15, stating that it is known to avoid the risk of leather panels becoming unstuck by using a more rigid non-inflatable, i.e. non-elastic bladder, a solution that is different to that proposed by the present invention.

In view of the main teaching of D6, it is far from obvious for the skilled person to consider using excess glue, since this would go against one of the core aspects of D6's teaching, namely that it is important that the flowable material 17 intimately surrounds and embraces the panels to ensure uniform bonding of panels and bladder covering (page 3, last paragraph). As explained above in section 3.3.5, this means that the material 17 enters the junction between panels, forcing them apart and preventing glue from entering where they abut. Providing glue between the panels would likely result in a stronger bonding at the edges of the panels, in other words an *irregular* bonding of the panels to the bladder cover, rather than the uniform bonding which D6 aims to achieve. Furthermore, bonding the panels where they abut would require the teaching of D6 to be purposefully modified in order to prevent the material 17 from flowing into the joints between panels and allow glue to flow there instead. In the absence of any hint as to how to do this, far from

being routine, such a modification requires skills and abilities exceeding those of the skilled person.

Nor does the Board believe the skilled person would draw on general knowledge to modify the ball of D6 and so arrive in an obvious manner at the claimed subject-matter.

In the absence of any indication in the prior art that butt jointing and bonding folded edges of leather panels on a ball improves durability and water tightness, the skilled person would not, as a matter of obviousness, provide an excess of glue on the reinforced bladder prior to bonding the panels thereto. Nor would he change the process by which the panels are pressed to the bladder in the second mould 12 (page 3, lines 30 to 38 and figure 6) to ensure that not the material 17 but glue is squeezed into the junction between panels, as explained above.

Similarly, the Board is unconvinced that the skilled person would as a matter of obviousness draw on common general knowledge or knowledge in the field of sealing the seams of hand-stitched balls against water and so arrive at the desired bonding. No evidence has been provided to support this argument. Nor is there any indication that the problem exists in laminated balls such as those of D6. Moreover, even if the Board were to accept this as known, sealing a junction of two parts with sealant may close the junction to water, it does not normally or necessarily bond the two parts together, i.e. sealing a junction does not equate with bonding the panels that form the junction. Consequently, even if the skilled person were as a matter of obviousness to seal the junctions between panels of a laminated ball as in D6 with sealant (which

the Board doubts), he would still not have arrived at the ball of claim 1 as upheld, in particular one in which panels are bonded in a butt joint between their folded portions.

4. In conclusion, the arguments presented by the appellant fail to demonstrate a lack of inventive step of the subject matter of claim 1 upheld by the decision under appeal. The Board therefore confirms the findings of that decision.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis A. de Vries

Decision electronically authenticated