Datasheet for the decision of 6 April 2017

Case Number: T 1931/12 - 3.2.01

Application Number: 05107642.0

Publication Number: 1630008

IPC: B60C11/24

Language of the proceedings: EN

Title of invention:
Tire tread wear indicator and molding device for forming a tread wear indicator

Patent Proprietor:
The Goodyear Tire & Rubber Company

Opponent:
MICHELIN Recherche et Technique S.A.

Headword:

Relevant legal provisions:
EPC Art. 56, 84
RPBA Art. 13(1)
Keyword:
Inventive step (main request: no, auxiliary request 5: yes)
Admission of new line of argument (no)
Admission of auxiliary request (auxiliary request 5: yes)

Decisions cited:

Catchword:
Case Number: T 1931/12 - 3.2.01

DECISION of Technical Board of Appeal 3.2.01 of 6 April 2017

Appellant: MICHELIN Recherche et Technique S.A.
(Opponent)
Route Louis Braille 10
1763 Granges-Paccot (CH)

Representative:
Demaure, Pierre-Yves
Manufacture Française
des Pneumatiques Michelin
23, place des Carmes - Déchaux
SGD/LG/PI - F35 - Ladoux
63040 Clermont-Ferrand Cedex 9 (FR)

Respondent: The Goodyear Tire & Rubber Company
(Patent Proprietor)
1144 East Market Street
Akron, OH 44316-0001 (US)

Representative:
Kutsch, Bernd
Goodyear S.A.
Patent Department
Avenue Gordon Smith
7750 Colmar-Berg (LU)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
2 July 2012 concerning maintenance of the

Composition of the Board:
Chairman G. Pricolo
Members: C. Narcisi
F. Guntz
Summary of Facts and Submissions

I. European patent No. 1 630 008 was maintained in amended form by the decision of the Opposition Division posted on 2 July 2012. Against the decision an appeal was lodged by the Opponent on 31 August 2012 and the appeal fee was paid at the same time. The statement of grounds of appeal was filed on 12 November 2012.

II. Oral proceedings were held on 6 April 2017. The Appellant (Opponent) requested that the appealed decision be set aside and that the patent be revoked. The Respondent (Patentee) requested that the appeal be dismissed and the patent be maintained as amended according to the impugned decision (main request) or, in the alternative, according to auxiliary request 5 (filed during oral proceedings on 6 April 2017). Previously filed further auxiliary requests were withdrawn.

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

"A tire tread for a vehicle tire, the tread having at least one tread element, the at least one tread element having a tread wear indicator (20) comprising a series of three or four radially adjacent stacked portions (38A, 38B, 38C, 38D), each portion having a configuration that visually indicates the tread depth, wherein each portion has a different configuration, wherein in the configurations appear consecutively and only one of the radially stacked portions (38A, 38B, 38C, 38D) of the tread wear indicator (20) is visible in the tread, wherein each radially stacked portion (38A, 38B, 38C, 38D) has a constant configuration for the radial depth of each portion, and wherein the wear indicator (20) is located in the tread in such a manner
as to make contact with the road as the tire rotates even when the tire is new and unworn."

Claim 1 of auxiliary request 5 reads as follows:

"A molding device for forming a tread wear indicator (20) in a tread, the molding device (30) comprising a mold blade (38), the mold blade (38) comprising a series of three or four radially adjacent stacked portions (38A, 38B, 38C, 38D) wherein each portion has a different configuration, wherein each radially stacked portion of the mold blade has a constant configuration for the length of the respective portion, wherein the molding device further comprises a tube (32) surrounding the mold blade (38), and wherein the molding device (20) is further characterized by there being at least a single pint of contact (40) between the stacked portions (38A, 38B, 38C, 38D) of the mold blade (38) so that the mold blade is a single molding element."

IV. The Appellant's arguments may be summarized as follows:

The subject-matter of claim 1 (main request) is not inventive over document E6 in view of D9. The feature reading "a series of three or four radially adjacent stacked portions" cannot contribute to inventive step, even on the assumption that an increased number of radially stacked portions (or configurations) would solve the objective problem of providing to the user additional information on the tread wear. In effect, it is not specified in the patent specification (hereinafter designated as EP-B) why such a selection of three or four configurations would be inventive over E6, where a tread indicator with only two such configurations was chosen. In any event, a tread wear
indicator having three different configurations is known from E9 and the combination of E6 and E9 would be obvious for the skilled person.

Auxiliary request 5, filed during oral proceedings, should not be admitted to the appeal proceedings since it was filed late. Filing of this new request, wherein dependent claims 3 and 4 as present in former auxiliary request 5 (filed on 21 March 2013) have been deleted, should have occurred at an earlier stage of the proceedings. The Respondent had ample opportunity to act before, already knowing objections based on lack of clarity previously raised by the Appellant (in writing) against these claims.

The subject-matter of claim 1 of auxiliary request 5 lacks clarity. The feature reading "at least a single point of contact (40) between the stacked portions (38A, 38B, 38C, 38D) of the mold blade (38) so that the mold blade is a single molding element" (hereinafter designated as feature (i)) is not unambiguous in that a "single point of contact" is not physically meaningful and a single molding element does not make clear whether the mold blade is integrally formed and whether it is made of one or more materials.

The subject-matter of claim 1 lacks an inventive step over E3 or E1/E2. E3 discloses in particular a mold blade for forming the middle portion (bridging two sides) of the depicted number "8" (see figure 3) representing the upper configuration of the wear indicator, and a tube surrounding the mold blade constituted by the remaining parts of the mold blade forming the outer portion of said number "8" and the cylindrical portion 9 located thereupon. Thus, the only remaining difference to claim
l resides in that according to claim 1 "three or four radially adjacent stacked portions" are provided. However, as previously discussed, this feature is deprived of technical meaning, lies within the usual capabilities of the skilled person and is moreover explicitly suggested as a possible variant of the disclosed embodiments in E3 (E3, column 1, line 45-50).

The subject-matter of claim 1 is not inventive over E1/E2. Indeed, E1/E2 discloses in figure 1(b) a generally tubular tread block surrounding the tread wear indicator. Therefore the corresponding molding element forming and delimiting the tread block has tubular form and surrounds the mold blade forming the tread wear indicator. Hence, the obvious combination with figure 3(h) in E1/E2, showing a tread wear indicator having three radially stacked adjacent configurations, would directly lead the skilled person to the claimed subject-matter without the exercise of an inventive activity.

The line of argument based on E15 against inventive step being involved in the subject-matter of claim 1 should be admitted to the appeal proceedings. E15 was already mentioned in the notice of opposition and was used to discuss the features of granted claim 7 in EP-B, these features lacking an inventive contribution over E15. Hence, the Patentee could not be surprised by the introduction of this document which was also mentioned in the statement of grounds of appeal, in relation to the interpretation of the term "mold blade" (see page 24). E15 is relevant to claim 1, for it shows a mold blade 120 (figure 13A) and a tube 122 surrounding the mold blade.
V. The Respondent's arguments may be summarized as follows:

The subject-matter of claim 1 of the main request involves an inventive step over E6 and E9. E6 discloses an old technology, wherein the tread wear indicator comprises an insert which is arranged in a cavity of corresponding shape formed with a removable object appropriately positioned in the tire's mold. The skilled person would not modify the wear indicator of D6 such as to include three (or four) radially stacked portions since this would result in a more complex production process, making extraction of said removable object and the production of said insert more difficult and costly, due to the small radial dimensions of the insert and of the tire tread's thickness. Also, no combination with E9 would be envisaged by the skilled person, E9 using a different manufacturing technique and a different type of wear indicator, all implemented configurations (or radially stacked portions) being clearly visible on the tread's outer surface.

The subject-matter of claim 1 (of auxiliary request 5) is clear since it is unambiguously stated that the mold blade consists of only one mechanically connected constructional element.

The subject-matter of claim 1 is inventive over E3 and over E1/E2, no tube surrounding the mold blade being disclosed or suggested in E3 or E1/E2, the tube acting to call attention to the configuration of the mold blade (see patent specification (hereinafter designated as EP-B), [0017]).

The new line of argument based on E15 (against inventive step involved by the subject-matter of claim
1) should not be admitted to the appeal proceedings, for E15 was never used before by the Opponent against granted claim 6 (relating to a mold device) or against claim 4 of the main request (corresponding to present claim 1).

Reasons for the Decision

1. The appeal is admissible.

2. The subject-matter of claim 1 according to the main request lacks an inventive step (Article 56 EPC) over E6. The Board shares the Appellant's view that, in order to provide more detailed information to the user concerning the tread wear, the skilled person would devise a tread wear indicator having an additional (third) configuration, particularly in view of E9. The combination of E6 and E9 would be obvious, for similar and largely equivalent shapes of tread wear indicators are disclosed in E6 (figures 1, 2) and E9 (see E9, figures 1 to 6). The Patentee's contentions relating to increased manufacturing difficulties could not convince the Board. In particular there is no evidence that even within the framework of the manufacturing process as contemplated by E6, a mere difference consisting in adding a single configuration (or radially stacked portion) to the tread wear indicator of E6, would make the manufacturing method impracticable or unworkable.

3. The Board decided to exercise its discretionary power pursuant to Article 13(1) RPBA (Rules of Procedure of the Boards of Appeal) to admit present (new) auxiliary request 5. This request differs from previous auxiliary request 5 (filed on 21 March 2013) only in that dependent claims 3 and 4 were deleted. The Respondent decided to delete these claims following an objection
of the Board based on Rule 80 EPC. In effect, these claims were not present in EP-B and were introduced into the set of claims of former auxiliary request 5 (based on features extracted from the description), despite this amendment not being occasioned by a ground of opposition under Article 100 EPC. Thus, present (new) auxiliary request 5 was filed in response to an objection raised by the Board during oral proceedings based on Rule 80 EPC. In addition, such a deletion did not add to the complexity of the case and did not affect procedural economy at the given state of the proceedings. For these reasons it was decided to admit present (new) auxiliary request 5 into the appeal proceedings.

4. The subject-matter of claim 1 (of auxiliary request 5) complies with the requirements of Article 123(2) EPC. The Board notes that claim 1 results from the combination of granted claims 6, 8 and 10, with the further amendment reading "so that the mold blade is a single molding element". This amendment is clearly supported by EP-B (see [0015]) and was not disputed by the parties.

5. The subject-matter of claim 1 of auxiliary request 5 does not contravene Article 84 EPC. In effect, said contested feature (i) clearly and unambiguously entails that the mold blade consists of only one mechanically connected constructional part.

6. The subject-matter of claim 1 (of auxiliary request 5) would not be obvious for the skilled person in view of prior art E3 or E1/E2 (Article 56 EPC). E3, contrary to the Appellant's view, simply does not disclose that the "molding device further comprises a tube (32) surrounding the mold blade (38)", since the
mold blades 8,9 merely serve the purpose of forming the upper and lower configuration (see number "8" and "stop" sign in figures 2,3) of the tread wear indicator (E3, see figures 2 to 4, 8). No further mold components are provided to form a tube surrounding the mold blade. The above difference likewise involves an inventive step, for no suggestion is deducible (implicitly or explicitly) from the prior art documents to use a surrounding tube to call attention to the configuration of the blade after the tread wear indicator has been formed (see EP-B, paragraph [0017]), and to provide the mold blade as a single molding element surrounded by the tube.

Starting from E1/E2 the skilled person would not arrive in an obvious manner at the subject-matter of claim 1 of the fifth auxiliary request. From figure 1(b) it cannot be inferred that a molding element according to claim 1 is disclosed, having the shape of a tube surrounding the mold blade (for forming the illustrated configurations of the tread wear indicator). Indeed, the tube considered by the Appellant in figure 1(b) is not part of "a molding device for forming a tread wear indicator" as required by claim 1, said tube in E3 being obviously solely intended to shape the outer surface of the tire tread to form said tread block (see Appellant's arguments). Thus, it is only an element of the mold forming the tire tread surface and it can in no way fulfil the intended object of calling the attention to the configuration of the blade after the tread wear indicator has been formed. This for the reason that it bears no direct relation to the tread indicator. Consequently, the combination of figures 1(b) and 3(h) would not lead to the claimed subject-matter.
7. The Board decided to exercise its discretionary power pursuant to Article 13(1) RPBA (Rules of Procedure of the Boards of Appeal) not admitting the Appellant's new line of argument (against inventive step being involved in the subject-matter of claim 1 of auxiliary request 5) based on document E15. The Board considered that E15 was never used previously during opposition proceedings and appeal proceedings as a basis for attacking granted claim 6 relating to a molding device (or e.g. claim 4 according to the main request) on which present claim 1 is based. Hence, by contrast to the Appellant's view, the Respondent could in no way expect such a new line of argument, which should have been submitted earlier. Also, in view of the advanced state of the proceedings, the other lines of arguments having already been discussed, the Board saw no reason to admit this new line of argument in view of procedural economy. This all the more, given that according to a prima facie assessment of the relevance of E15, it cannot be seen that the tube 122 (see figure 13A) surrounds the blade 121. Therefore E15 does not appear to be any more relevant than the prior art already discussed.

8. The description was adapted to the set of claims of auxiliary request 5.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent based on the following documents:

   - claims 1 and 2 of the auxiliary request as submitted during oral proceedings;
   - description columns 1 to 6 as submitted during oral proceedings;
   - figures 1 to 5 of the patent as granted.

The Registrar:  The Chairman:

A. Vottner      G. Pricolo

Decision electronically authenticated