

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL B. RODGERS, RAM M. KRISHNAN, RAY E. BEERY,
PAUL H. SANDSTROM, BILL B. GROSS, and LEWIS T. LUKICH

Appeal No. 2004-1784
Application No. 09/685,372

ON BRIEF

Before GARRIS, TIMM, and PAWLIKOWSKI, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 1-6, 8-10, and 16-20. These are all of the claims remaining in the application.

The subject matter on appeal relates to an endless rubber track. With reference to the appellants' drawing, the rubber

track 1 has an outer tread comprised of a plurality of raised rubber lugs 3 and an inner surface comprised of a plurality of rubber guide lugs 5 designed to be guided and/or engaged by a vehicular drive wheel and a rubber guide lug support layer 5A, wherein the guide lugs are positioned on and co-vulcanized and integral with the guide lug support layer and wherein the guide lug support layer is positioned on and integral with the inner surface of the rubber track. The aforementioned guide lug support layer is of a rubber composition comprised of certain elastomers, a reinforcing filler and a coupling agent. Further details concerning this composition are set forth in representative independent claim 1¹ which reads as follows:

1. An endless rubber track designed to encompass a combination of at least one vehicular drive wheel and at least one vehicular guide wheel is provided wherein said rubber track has an outer tread comprised of a plurality of raised rubber lugs designed to be ground engaging and an inner surface comprised of a plurality of spaced apart rubber guide lugs designed to be guided and/or engaged by said vehicular drive wheel, and a rubber guide lug support layer, wherein said guide lugs are positioned on and co-vulcanized and integral with said guide lug supporting rubber layer, wherein said guide lug support layer is positioned on and integral with the inner surface of said rubber track; and wherein said guide lug support layer is of a rubber composition comprised of, based upon 100 parts by weight elastomers (phr),

¹ On line 7 of claim 1, the following informality is present and is deserving of correction: the phrase "said guide lug supporting rubber layer" lacks strict antecedent basis and should read --said guide lug support layer --.

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(A) said elastomers comprised of

(1) about 30 to about 70 phr of cis 1, 4-polyisoprene natural rubber and, correspondingly,

(2) about 70 to about 30 phr at least one additional elastomer comprised of

(i) about 30 to about 70 phr of cis 1,4-polybutadiene rubber and, correspondingly,

(ii) about zero to about 20 phr of styrene/butadiene copolymer rubber which contains from about 10 to about 40 weight percent bound styrene;

(B) about 30 to about 70 phr of reinforcing filler selected from rubber reinforcing carbon black and synthetic amorphous silica comprised of about 40 to about 70 phr of said carbon black and from zero to about 50 phr of said silica, and

(C) a coupling agent for said silica having a moiety which is reactive with hydroxyl groups (silanol groups) contained on the surface of said silica and another moiety interactive with said diene based elastomer(s).

The references set forth below are relied upon by the examiner as evidence of obviousness:

Yokohama Rubber Co.	JP 11-199710	Jul. 27, 1999
Sandstrom et al. (Sandstrom '161)	EP 0 989 161	Mar. 29, 2000

According to the examiner, "Claims 1-20 [sic, Claims 1-6, 8-10 and 16-20] are rejected under 35 U.S.C. [§] 103(a) as being unpatentable over Yokohama Rubber Co. in view of Sandstrom '161" (answer, page 3). In the sentence bridging pages 3 and 4 of the answer, the examiner expresses his obviousness conclusion as follows:

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Yokohama Ruber C. [sic, Yokohama Rubber Co.] to include the use of an elastomer having the composition of about 30-70 phr polyisoprene rubber, about 70 to 30 phr of polybutadiene rubber, 30 to 70 phr of reinforcing carbon black in addition to a coupling agent to the inner guide lug support layer of his advantageous endless track in order to increase the strength of the inner guide lug and support layer thereby reducing shear and wear between the inner guide lug member and the support layer [in view of Sandstrom].

We refer to the brief and reply brief and to the answer for a complete discussion of the opposing viewpoints expressed by the appellants and by the examiner concerning this rejection.

OPINION

For the reasons which follow, the above noted rejection cannot be sustained.

In order to establish a prima facie case of obviousness under 35 U.S.C. § 103(a), the references here applied by the examiner must provide a suggestion for the modification proposed by the examiner as well as a reasonable expectation that the proposed modification would be successful. See In re O'Farrell, 853 F.2d 846, 850-51, 7 USPQ2d 1673, 1680-81 (Fed. Cir. 1988). The references before us provide neither the requisite suggestion nor the requisite reasonable expectation of success.

More specifically, the examiner acknowledges that the Yokohama Rubber Co. reference, though disclosing an endless

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rubber track with an inside rubber layer which generally corresponds to the here claimed guide lug support layer, fails to identify this inside rubber layer as having the rubber composition defined by appealed independent claim 1. In the examiner's view, however, it would have been obvious for an artisan to modify the Yokohama Rubber Co. reference so that the inside rubber layer is comprised of the composition in question in view of Sandstrom who is said to teach such a rubber composition. We cannot agree.

This is because the rubber composition of Sandstrom is for the preparation of the tread and sidewall components of tires designed for relatively heavy loads such as truck tires (e.g., see the Abstract and the first paragraph on page 2). We find nothing and the examiner points to nothing in the applied prior art which would have suggested that a rubber composition suitable for preparing the tread and sidewall components of such tires also would be suitable for preparing the inside rubber layer of the endless rubber track taught by the Yokohama Rubber Co. reference. Likewise, we find nothing and the examiner points to nothing which would have given an artisan a reasonable expectation that Sandstrom's tire tread and sidewall composition would be successful when used for preparing the inside rubber

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layer of the endless rubber track disclosed by the Yokohama Rubber Co. reference. Concerning these matters, the examiner states that an artisan would have combined the applied reference teachings in the manner here proposed "in order to increase the strength of the inner guide lug and support layer thereby reducing shear and wear between the inner guide lug member and the support layer" (answer, page 4). Yet again, the examiner points to nothing in the applied prior art which supports this statement, and our independent study of this prior art reveals that the examiner statement is utterly devoid of support by the applied references and therefore conjectural at best.

The foregoing circumstances require us to determine that the examiner has failed to establish a prima facie case of obviousness with respect to the subject matter defined by appealed independent claim 1. It necessarily follows that we cannot sustain the examiner's section 103 rejection of all appealed claims as being unpatentable over the Yokohama Rubber Co. reference in view of Sandstrom. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

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The decision of the examiner is reversed.

REVERSED

Bradley R. Garris)	
Administrative Patent Judge)	
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Catherine Timm)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Beverly A. Pawlikowski)	
Administrative Patent Judge)	

BRG:tdl

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