Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAHIRO KATAYAMA

Appeal No. 2001-2495
Application 09/110,876

ON BRIEF

Before KIMLIN, WALTZ and KRATZ, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 3-7 and 9-14. Claims 2 and 8, the other claims remaining the present application, have been indicated as allowable by the examiner.[1]

Claims 1 and 5 are illustrative and a copy of these claims is appended to this decision.

The examiner relies upon the following references as evidence of obviousness:

[1] The examiner's § 103 rejection of claim 8 has been withdrawn (see footnote at page 2, in answer).

Boileau	3,707,177	Dec. 26, 1972
Lagnier	4,994,126	Feb. 19, 1991
Sugata et al. (JP '604)	JP 04-212,604	Aug. 04, 1992
Yasuo (JP '514)	JP 08-207,514	Aug. 13, 1996
Kurokawa (JP '419)	JP 08-244,419	Sep. 24, 1996
Beckmann (EP '230)	EP 664,230	Jul. 26, 1995

Appellant's claimed invention is directed to a pneumatic tire having a plurality of block-shaped land portions having at least four sipings, or incisions therein. The sipings comprise first and second linear portions which extend in a direction perpendicular to the surface of the land portion as well as a line portion which connects the first and second linear portions. According to appellant "[t]he invention is directed to an improvement of a block-type pattern by optimizing the sipes themselves to improve dynamic performance of the tire in wet and ice conditions yet at the same time minimizing irregular wear which is characteristic of the prior art" (page 2 of the brief, penultimate paragraph).

The appealed claims stand rejected under 35 U.S.C. § 103 as follows:

(1) Claims 1, 3, 4, 12 and 13 over EP '230 in view of Lagnier and either JP '604 or JP '514;

(2) Claims 5, 9 and 10 over JP '604 in view of Boileau;

(3) Claims 6, 7 and 11 over JP '604 in view of Boileau and EP '230; and

(4) Claim 14 over JP '419 in view of JP '514.

Appellant submits at page 5 of the principal brief that "[f]or each of the rejections, the claims as grouped by the Examiner stand together." Accordingly, the following groups of claims stand or fall together: I. Claims 1, 3, 4, 12 and 13; II. Claims 5, 9 and 10; III. Claims 6, 7 and 11; IV. Claim 14.

We have thoroughly reviewed each of appellant's arguments for patentability, as well as the specification data relied upon in support thereof. However, we are in complete agreement with the examiner's reasoned analysis and application of the prior art, as well as his cogent and thorough disposition of the arguments raised by appellant. Accordingly, we will adopt the examiner's reasoning as our own in sustaining the rejection of record, and we add the following for emphasis only.

We consider first the examiner's rejection of claims 1, 3, 4, 12 and 13 under § 103 over EP '230 in view of Lagnier and either JP '604 or JP '514.

There is apparently no dispute that EP '230 discloses a pneumatic tire having block-shaped land portions having incisions, or sipings, within the land portions, with the incisions having the claimed first and second linear portions and sloping land portion which connects the first and second linear portions. It is appellant's contention that the incisions of Figure 5 of EP '230 are different in configuration from the claimed arrangement inasmuch as appellant finds the sipes as having three components. We agree with the examiner, however, that although the sipes of EP '230 comprise two branches which stem off the initial incision, the appealed claims do not preclude the branching configuration depicted by EP '230. For instance, claim 1 only requires that the sipings have first and second linear portions which extend in a direction perpendicular to the surface of the land portion and a sloping land portion which connects the first and second linear portions. Manifestly, the incisions of EP '230 meet these claim requirements and appellant does not argue otherwise.

Appellant also contends that "the effect of suppressing deformation cannot be reasonably achieved throughout the life of

the tire" disclosed by EP '230 or Lagnier (page 8 of principal brief, penultimate paragraph). Appellant has attached Appendix C to the brief to support this argument. However, the graph of Appendix C has not been submitted in declaration form and, therefore, is of little probative value. Furthermore, inasmuch as the appealed claims do not preclude the sipe configuration of EP '230, this argument is not germane to the claimed subject matter.

We are also unpersuaded by appellant's argument that EP '230 does not suggest the claimed at least four sipings. Appellant focuses upon the 3 sipings depicted in Figure 5 of EP '230. However, we concur with the examiner that the reference teaches the use of a plurality of sipings and is not limited to the three sipings exemplified in Figure 5. Significantly, the reference establishes the number of sipings as a result effective variable by disclosing that "[d]epending on the purpose of the tire, one provides a larger or smaller number of fine incisions; for example, for good snow traction, it is important to put a large number of fine incisions in the thread strip" (page 2 of

translation, second paragraph). In addition, JP '604 and JP '514 evinces what is acknowledged by appellant, namely, that it was known in the art at the time of filing the present application to employ four sipings in the land portions of a pneumatic tire.

Appellant submits at page 10 of the principal brief that comparative test data demonstrates the superiority of the invention to tires which conform substantially to JP '604 and JP '514, which appellant characterizes as the closest prior art. We agree with the examiner, however, that the comparative data is of little probative value inasmuch as JP '604 and JP '514 have not been established as the closest prior art. In our view, Figure 5 of EP '230, which depicts sipings having first and second linear portions connected by a sloping line portion, is closer prior art than the sipings of JP '604 and JP '514. Also, appellant has not refuted the examiner's position that "[t]he evidence is not commensurate in scope with the claims since the claims fail to require unitary sipe configuration evenly spaced throughout the block pattern in which the number of sipes does not change from a new tire condition through various stages of wear" (page 19 of answer, first paragraph).

In addition, appellant has provided scant analysis of the specification data and has not established on this record that the data would have been considered truly unexpected by one of ordinary skill in the art. In re Merck & Co., 800 F.2d 1091, 1099, 231 USPQ 375, 381 (Fed. Cir. 1986).

Concerning the examiner's rejection of claims 5, 9 and 10 over JP '604 in view of Boileau, we concur with the examiner that, since both JP '604 and Boileau are directed to pneumatic tires having tread patterns for wintery, icy-snowy roads, it would have been obvious for one of ordinary skill in the art to modify the tread pattern of JP '604 such that the wall surface of each block on a transverse groove side has a stepped configuration in accordance with Boileau. As explained by the examiner, "Boileau teaches that the variation in width of the wall surfaces (i.e. the stepped configuration) provides the relief elements with a relatively wide base so that they are less fragile and so that as the tire wears it can be used as a summer tire (can be driven comfortably in other than winter conditions especially as wear of the tire increases). See column 1 of Boileau." (page 12 of answer, last two sentences). As for

appellant's argument at page 11 of the principal brief that "the artisan would recognize immediately that the two tread patterns of the prior art [JP '604 and Boileau] are mutually exclusive with each other" (second paragraph), we are in agreement with the examiner's rationale that "Boileau's inclusion of both a block pattern and a rib pattern in his disclosure suggests to one of ordinary skill in the art that Boileau's teaching to use the stepped configuration to obtain the desired high cut out percentage is applicable to a wide variety of tread patterns which like the tread pattern of Japanese '604 is to be used in winter conditions." (page 20 of answer, second paragraph). Appellant has not explained why Boileau's failure to depict a tread pattern with a main groove along the circumferential direction of the tire would have dissuaded one of ordinary skill in the art to apply the stepped configuration to the wall surface of the block portions of JP '604.

In the interest of avoiding redundancy, we will not further comment on the examiner's separate rejections of claims 6-8 and 11, and claim 14, which rejections we incorporate herein.

In conclusion, based on the foregoing, and the reasons well-stated by the examiner, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

EDWARD C. KIMLIN Administrative Patent Judge	)	
THOMAS A. WALTZ Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
PETER F. KRATZ Administrative Patent Judge	)	

vsh

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20037-3202

APPENDIX
Claims 1 and 5

1. A pneumatic tire provided with a tread divided into a plurality of block-shaped land portions, the periphery of each of said block-shaped land portions being bordered by a plurality of main grooves extending in the circumferential direction of said pneumatic tire, and by a plurality of lug grooves extending in the transverse direction of said pneumatic tire and intersecting said main grooves, and each of said block-shaped land portions having at least four sipings aligned in a transverse direction each of said sipings comprising:

a first linear portion which essentially extends in a direction perpendicular to the surface of said block-shaped land portion and contacts the tread surface;

a second linear portion which essentially extends in a direction perpendicular to the surface of said block-shaped land portion and is separated from the surface of said block-shaped land portion; and

a sloping line portion which connects said first linear portion and said second linear portion and is inclined in a direction towards a wall surface of said block-shaped land portion, so as to define a step,

wherein a position of a center of said sloping line portion is set to between 10% to 60% of the siping depth measured from said tread surface.

APPENDIX (CONT.)

5. A pneumatic tire provided with a tread divided into a plurality of block-shaped land portions, the periphery of each of said block-shaped land portions being bordered by a plurality of main grooves extending in the circumferential direction of said pneumatic tire, and by a plurality of lug grooves extending in the transverse direction of said pneumatic tire and intersecting said main grooves, and each of said block-shaped land portions having at least four sipings aligned in a transverse direction, wherein:

a wall surface of each of said block-shaped land portions on a lug groove side has a stepped configuration defining a stepped portion and a base portion of said block-shaped land portions is larger than a tread portion of said block-shaped portions.