(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 November 2012 (22.11.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/158505 A4

(51) International Patent Classification:
B60C 9/18 (2006.01) *B60C 9/20* (2006.01)

(21) International Application Number:
PCT/US2012/037484

(22) International Filing Date:
11 May 2012 (11.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/486,375 16 May 2011 (16.05.2011) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

— *with amended claims (Art. 19(1))*

(88) Date of publication of the international search report:
10 January 2013

Date of publication of the amended claims: 28 March 2013

(54) Title: PNEUMATIC TIRE AND ELASTOMERIC ARTICLES HAVING AROMA-EMITTING FUNCTIONALITY

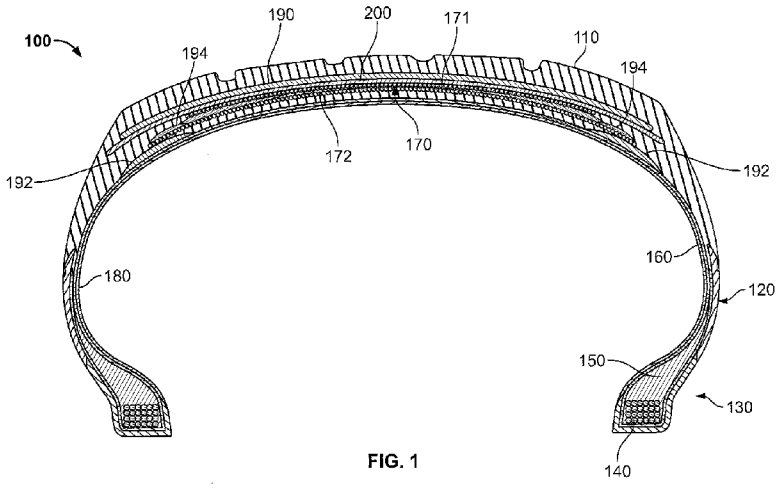

FIG. 1

(57) Abstract: A pneumatic tire is disclosed having an indicator of tire wear condition. The pneumatic tire has a circumferential tread and a pair of sidewalls, at least one of which comprises a barrier layer and an indicator layer, where the barrier layer is located above or outward from the indicator layer, which comprises a tire rubber composition having at least one fragrant chemical. A pneumatic tire is also disclosed having an indicator of elevated tire temperature. At least one of the tire portions comprises a tire rubber composition having thermally-activated fragrant chemical. Further, a pneumatic tire is disclosed comprising a tire rubber composition having polymeric or resinous microcapsules containing at least one fragrant chemical.

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AMENDED CLAIMS
received by the International Bureau on 28 December 2012 (28.12.2012)

We claim:

1. A pneumatic tire having an indicator of tire wear condition, comprising:

a circumferential tread; and

a pair of sidewalls extending downwardly from the circumferential tread;

a barrier layer located above or outward from an indicator layer;

where the indicator layer comprises at least one fragrant chemical comprising microcapsules having polymeric walls; and,

where at least one of the tread and sidewalls comprises the barrier layer.

2. The pneumatic tire of claim 1, where the polymeric walls comprises aliphatic or aromatic polysulfide containing between 1 and 6 moles of sulfur per mole of monomer unit.

3. The pneumatic tire of claim 1, where the polymeric walls comprise a condensation polymer, including at least one of a monomeric unit derived from diol monomer having general structure HO-R'-OH or diacid monomer having general structure HO_2C-R'-CO_2H, where R' has general structure $(CH_2)_x$-$\underset{\displaystyle SH}{\underset{|}{CH}}$-$(CH_2)_y$, and where x and y can range from 1 to about 5, and where the total condensation polymer comprises from 1 to 100 mole per cent R'.

4. The pneumatic tire of claim 1, where the polymeric wall comprises a condensation polymer comprising at least one of a diol monomer having general structure HO-R'-OH or a diacid monomer having general structure HO_2C-R'-CO_2H, where R' has general structure $(CH_2)_x$-S_y-$(CH_2)_z$, and where x and z can range from 1 to about 5 and y can range from 1 to about 6, and where the total condensation polymer comprises from 1 to 100 mole per cent R'.

5. A pneumatic tire having an indicator of elevated tire temperature, comprising:

a circumferential tread portion, a pair of sidewall portions extending downwardly from the circumferential tread, a circumferential belt portion comprising a first and second layer disposed below the tread portion;

where at least one of the tread portion, sidewall portion and circumferential belt portion comprises a tire rubber composition comprising from 0.1 to 20 phr of a thermally-activated fragrant chemical.

6. The pneumatic tire of claim 5, further comprising at least one belt edge insert beneath the belt portion, and at least one belt wedge between the first and second layer, where the at least one of the belt edge insert or belt wedge comprise between 0.1 and 20 phr of at least one thermally-activated fragrant chemical, and where the at least one thermally-activated fragrant chemical has a melting point between 70° C and 130° C.

7. The pneumatic tire of claim 5, where the circumferential tread portion or sidewall portion, or both, have between 0.1 and 20 phr of at least one thermally-activated fragrant chemical, and where the at least one thermally activated fragrant chemical has a melting point between 70° and 130° C.

8. A pneumatic tire comprising:

a circumferential tread portion, a pair of sidewall portions each extending downwardly from the circumferential tread to a bead portion, a circumferential belt portion, a circumferential belt portion comprising a first and second layer disposed below the tread portion,

where at least one of the circumferential tread portion, sidewall portions, bead portions, a belt portion comprises a tire rubber composition having from 0.1 to 100 phr of microcapsules containing at least one fragrant chemical.

9. The pneumatic tire of claim 8 further comprising at least one belt edge insert beneath the belt portion, and at least one belt wedge between the first and second

layer, at least one of a cap ply disposed above the belt portion, or carcass ply disposed below the belt portion, and an inner liner portion disposed below the belt portion and the at least one of the cap ply and carcass ply;

where at least one of the circumferential tread portion, sidewall portions, bead portions, a belt portion, at least one belt edge insert, at least one belt wedge, at least one of a cap ply or carcass ply, and inner liner portion comprises a tire rubber composition having from 0.1 to 100 phr of microcapsules containing at least one fragrant chemical.

10. A pneumatic tire comprising:

a circumferential tread; and

an interior portion located below the circumferential tread, comprising:

a pair of sidewall portions each extending downwardly from the circumferential tread to a bead portion, a circumferential belt portion, a circumferential belt portion comprising a first and second layer disposed below the tread portion; and,

where at least one of the sidewall portions and bead portions comprises a tire rubber composition having from 0.1 to 100 phr of at least one fragrant chemical.

11. The pneumatic tire of claim 10, where the at least one fragrant chemical is selected from the group consisting essentially of ethers, esters, aldehydes, alcohols, lactones, linear terpenes, cyclic terpenes, amines, aromatics, ketones, thiols, acetals, organic acids, phenols, unsaturated cyclic and acyclic hydrocarbons, and naturally occurring fragrant oils and combinations thereof.

12. The pneumatic tire of claim 10, further comprising,

at least one belt edge insert beneath the belt portion, and at least one belt wedge between the first and second layer, at least one of a cap ply disposed above the belt portion, or carcass ply disposed below the belt portion, and an inner liner portion disposed below the belt portion and the at least one of the cap ply and carcass ply,

where at least one of the at least one belt edge insert beneath the belt portion, the at least one belt wedge between the first and second layer, the at least one of a cap ply disposed above the belt portion, or carcass ply disposed below the belt portion, and an inner liner portion disposed below the belt portion and the at least one of the cap ply and carcass ply, comprises a tire rubber composition having from 0.1 to 100 phr of at least one fragrant chemical.

13. The pneumatic tire of claim 12, further comprising,

where the at least one of the cap ply carcass ply and belt portion is comprised from at least one of the group consisting essentially of nylon, polyester, aramid, cotton, polynorbornene and rayon fibers and wherein the at least one of the cap ply, carcass ply and belt ply comprises from 0.1% to 10% by weight of at least one fragrant chemical.

STATEMENT UNDER ARTICLE 19(1)

Applicant has amended claims 1-13 of the present application for purposes of incorporating the elements of claims 2 and 3 into claim 1. Support for the amendment is provided in the original claims, the specification, and in the drawings. The amendment to claims 1–13 have no impact on the description and the drawings since they are fully supported by the description and the drawings.