

# (12) International Application Status Report

**Received at International Bureau:** 25 December 2019 (25.12.2019)

**Information valid as of:** 08 January 2020 (08.01.2020)

**Report generated on:** 26 September 2020 (26.09.2020)

**(10) Publication number:**

WO2020/129886

**(43) Publication date:**

25 June 2020 (25.06.2020)

**(26) Publication language:**

Japanese (JA)

**(21) Application Number:**

PCT/JP2019/049134

**(22) Filing Date:**

16 December 2019 (16.12.2019)

**(25) Filing language:**

Japanese (JA)

**(31) Priority number(s):**

2018-235358 (JP)

**(31) Priority date(s):**

17 December 2018 (17.12.2018)

**(31) Priority status:**

Priority document received (in compliance with PCT Rule 17.1)

**(51) International Patent Classification:**

**C08L 9/00** (2006.01); **B60C 1/00** (2006.01); **C08K 3/013** (2018.01); **C08K 5/5419** (2006.01); **C08L 7/00** (2006.01)

**(71) Applicant(s):**

THE YOKOHAMA RUBBER CO., LTD. [JP/JP]; 36-11, Shimbashi 5-chome, Minato-ku, Tokyo 1058685 (JP) *(for all designated states)*

**(72) Inventor(s):**

MURASE, Keisuke; c/o The Yokohama Rubber Co., Ltd., Hiratsuka Factory, 2-1, Oiwake, Hiratsuka-shi, Kanagawa 2548601 (JP)

**(74) Agent(s):**

SEIRYU Patent Professional Corporation; 37 Kowa Building, 4-5, Tsukiji 1-chome, Chuo-ku, Tokyo 1040045 (JP)

**(54) Title (EN):** RUBBER COMPOSITION FOR TIRE AND TIRE INCLUDING SAME

**(54) Title (FR):** COMPOSITION DE CAOUTCHOUC POUR PNEU ET PNEU LE COMPRENANT

**(54) Title (JA):** タイヤ用ゴム組成物およびそれを含むタイヤ

**(57) Abstract:**

**(EN):** Provided are: a rubber composition for a tire which is excellent in terms of dry steering stability, wet steering stability, low-rolling resistance, and on-snow performance; and a tire including the same. The rubber composition is characterized by being formed by adding 80-100 parts by mass of an inorganic filler and 0.5-5 parts by mass of alkylsilane having a C3-C20 alkyl group to 100 parts by mass of a diene rubber comprising a total 100 mass% of 20-45 mass% of a natural rubber, 20-45 mass% of a styrene butadiene rubber, and 20-45 mass% of a butadiene rubber, wherein the rubber hardness at 23 °C is 68 or more.

**(FR):** L'invention concerne : une composition de caoutchouc pour pneu qui est excellente en termes de stabilité de la direction sur sol sec, de stabilité de la direction sur sol mouillé, de faible résistance au roulement et de performance sur neige ; et un pneu la comprenant. La composition de caoutchouc est caractérisée en ce qu'elle est formée par l'ajout de 80 à 100 parties en masse d'une charge inorganique et de 0,5 à 5 parties en masse d'alkylsilane ayant un groupe alkyle en C3-C20 à 100 parties en masse d'un caoutchouc diénique comprenant un total de 100 % en masse de 20 à 45 % en masse d'un caoutchouc naturel, 20 à 45 % en masse d'un caoutchouc styrène butadiène, et 20 à 45 % en masse d'un caoutchouc butadiène, la dureté du caoutchouc à 23 °C étant de 68 ou plus.

**(JA):** ドライ操縦安定性能、ウェット操縦安定性能、低転がり抵抗性および雪上性能に優れたタイヤ用ゴム組成物およびそれを含むタイヤを提供する。天然ゴム20～45質量%、スチレンブタジエンゴム20～45質量%およびブタジエンゴム20～45質量%の合計100質量%からなるジエン系ゴム100質量部に、無機フィラーを80～100質量部および炭素数3～20のアルキル基を有するアルキルシランを0.5～5質量部配合してなるゴム組成物であって、23°Cのゴム硬度が68以上であることを特徴とする。

**International search report:**

Received at International Bureau: 23 March 2020 (23.03.2020) [JP]

## **International Report on Patentability (IPRP) Chapter II of the PCT:**

Not available

### **(81) Designated States:**

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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

European Patent Office (EPO) : 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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM