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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 January 2024 (18.01.2024)

WIPO | PCT

(10) International Publication Number
WO 2024/013616 A1

(51) International Patent Classification:
B60B 27/02 (2006.01) *F16D 41/32* (2006.01)

(21) International Application Number:
PCT/IB2023/056965

(22) International Filing Date:
05 July 2023 (05.07.2023)

(25) Filing Language: Polish

(26) Publication Language: English

(30) Priority Data:
PL P.441745 15 July 2022 (15.07.2022) PL

(72) Inventor; and
(71) Applicant: **KOZAK, Mariusz** [PL/PL]; SOUL-KOZAK Mariusz Kozak, ul. Szeroka 3, Franciszków, 21-040 Świdnik (PL).

(74) Agent: **TARAŁA, Magdalena**; KANCELARIA PATENTOWA MAGDALENA TARAŁA, ul. Wolska 11A lok. 12A, 20-411 Lublin (PL).

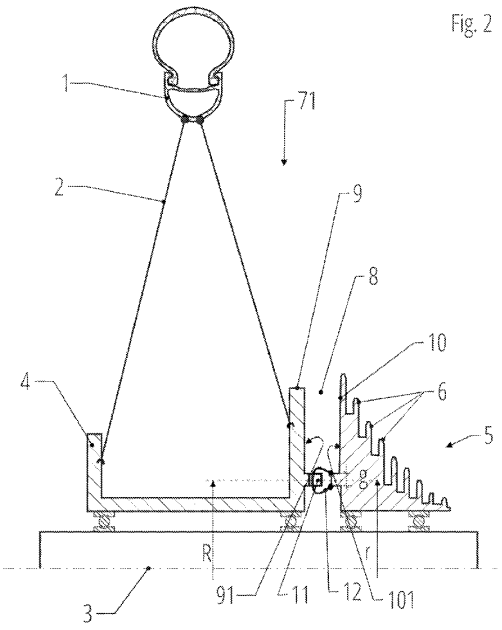
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ,

WO 2024/013616 A1

(54) **Title:** BICYCLE REAR WHEEL

Fig. 2



(57) **Abstract:** A bicycle rear wheel comprising a tire rim (1) with spokes (2), a hub body (4), a hub axle (3) on which at least one chain drive wheel (5, 6) is rotatably mounted, and an one-way clutch assembly comprising a flange (9) and a disc (10) placed next to each other, seated coaxially and with a gap (8), wherein the flange is ball-beared mounted on the hub axle (3), and the disc (10) is integrated with the chain drive wheel (6). The flange and the disc have each side surfaces (91, 101) facing each other and one of the flange and the disc has teeth (11) on its side surface, and the other has on its side surface at least one hook (12) located at a distance from the axle of the hub similar to or the same as the distance of the teeth from the axle.

[Continued on next page]

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, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

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