

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 August 2007 (16.08.2007)

PCT

(10) International Publication Number
WO 2007/091963 A1

(51) International Patent Classification:

B60K 17/348 (2006.01) **B62D 61/10** (2006.01)
B62D 11/02 (2006.01) **F16H 37/08** (2006.01)

(21) International Application Number:

PCT/SE2007/050056

(22) International Filing Date: 2 February 2007 (02.02.2007)

(25) Filing Language:

Swedish

(26) Publication Language:

English

(30) Priority Data:

0600297-6 10 February 2006 (10.02.2006) SE

(71) Applicant (for all designated States except US): **BAE SYSTEMS HÄGGLUNDS AKTIEBOLAG** [SE/SE];
S-891 82 Örnköldsvik (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HULTGREN, Joakim**
[SE/SE]; Flärke 302, S-890 37 Gideå (SE).

(74) Agent: **ALBIHNS STOCKHOLM AB**; Linnégatan 2,
S-114 85 Stockholm (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

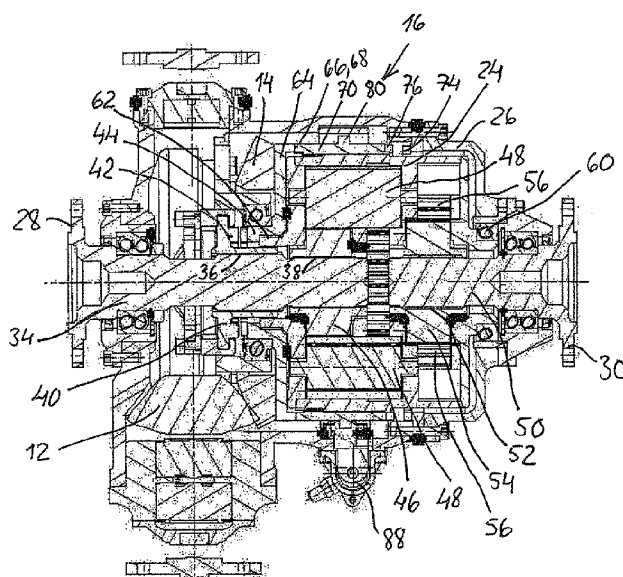
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A DIFFERENTIAL GEAR FOR A MULTI-SHAFT WHEELED MOTOR VEHICLE, AND A DRIVE TRAIN COMPRISING SEVERAL SUCH DIFFERENTIAL GEARS



(57) Abstract: A differential gear, comprising a first releasable lock (42, 44) between a crown wheel (14) and the one drive shaft, a second, releasable lock (66, 68) between the crown wheel (14) and a differential housing (24), and a third releasable lock (74, 76) between the differential housing (24) and fixed vehicle part (26). The second and third locks are designed to be opened and locked alternately with one another. It is thereby possible to achieve drive shafts rotating in opposite directions to one another on the left and right side of the vehicle and thereby to achieve a center swiveling of the vehicle when the first lock (42, 44) is simultaneously kept in the locked position.

WO 2007/091963 A1