

Title (en)
ELECTRIC DRIVE MODULE WITH TRANSMISSION HAVING PARALLEL TWIN GEAR PAIRS SHARING LOAD TO A FINAL DRIVE GEAR

Title (de)
ELEKTRISCHES ANTRIEBSMODUL MIT GETRIEBE, DAS PARALLELE DOPPELZAHNRADPAARE ZUR LASTVERTEILUNG AUF EIN
ENDGETRIEBE AUFWEIST

Title (fr)
MODULE D'ENTRAÎNEMENT ÉLECTRIQUE AVEC TRANSMISSION AYANT DES PAIRES DE ROUES DOUBLES COAXIALES PARALLÈLES
PARTAGEANT UNE CHARGE À UNE ROUE DE COMMANDE FINALE

Publication
EP 4069995 A4 20240522 (EN)

Application
EP 20897366 A 20201130

Priority
• US 201962942496 P 20191202
• US 2020062541 W 20201130

Abstract (en)
[origin: WO2021113159A1] An electric drive module that includes an electric motor, a differential assembly, and a transmission that transmits rotary power between the electric motor and the differential assembly. The transmission has first and second reductions. The first reduction has a drive gear, which is rotatable about a first axis, and a pair of first reduction gears that are each meshingly engaged to the drive gear rotatable about a respective second axis. The second axes are spaced apart from one another and are parallel to the first axis. The second reduction has a driven gear and a pair of second reduction gears. The driven gear is rotatable about a third axis that is parallel to the first axis. Each of the second reduction gears is being meshingly engaged to the driven gear and non-rotatably coupled to an associated one of the first reduction gears.

IPC 8 full level
B60K 1/00 (2006.01); **F16H 63/34** (2006.01); **B60K 17/356** (2006.01); **F16H 1/22** (2006.01); **F16H 48/08** (2006.01)

CPC (source: CN EP KR)
B60K 1/00 (2013.01 - CN EP KR); **B60K 17/165** (2013.01 - CN); **B60K 17/356** (2013.01 - KR); **F16H 1/22** (2013.01 - KR);
F16H 37/0806 (2013.01 - CN); **F16H 48/08** (2013.01 - CN); **F16H 63/3433** (2013.01 - CN EP KR); **B60K 17/356** (2013.01 - EP);
B60K 2001/001 (2013.01 - CN EP KR); **B60Y 2200/91** (2013.01 - CN EP KR); **F16H 1/22** (2013.01 - EP); **F16H 48/08** (2013.01 - EP);
F16H 2200/0021 (2013.01 - CN EP KR); **Y02T 10/64** (2013.01 - KR)

Citation (search report)
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• [A] DE 102017217829 A1 20190411 - ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]
• [A] GB 1106982 A 19680320 - BROWN GEAR IND
• [A] DE 102008038069 A1 20100225 - SCHULER PRESSEN GMBH & CO [DE]
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• [A] US 2019226566 A1 20190725 - HILLMAN CHAD ROBERT [US], et al
• See also references of WO 2021113159A1

Designated contracting state (EPC)
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WO 2021113159 A1 20210610; BR 112022004719 A2 20220614; CA 3151002 A1 20210610; CA 3151002 C 20231010;
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EP 4069995 A1 20221012; EP 4069995 A4 20240522; JP 2022543912 A 20221014; JP 2023159283 A 20231031; JP 7476303 B2 20240430;
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JP 2023133473 A 20230818; KR 20227008471 A 20201130; KR 20237004030 A 20201130; KR 20237015321 A 20201130;
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