Title (en)

SPRAGUE GEAR TRANSMISSION

Title (de)

ÜBERHOLGETRIEBE

Title (fr)

TRANSMISSION À ENGRENAGE À RATTRAPAGE DE JEU

Publication

EP 2513478 A1 20121024 (EN)

Application

EP 09797155 A 20091215

Priority

IB 2009007766 W 20091215

Abstract (en)

[origin: WO2011083347A1] A novel double-acting Sprague gear mechanical transmission is herein disclosed capable of converting reciprocating power inputs in both the forward and backward directions to a continuous rotational output in one direction while always maintaining an optimum ninety degree vector angle during operation in order to perform maximum transfer of power. A first Sprague gear catches on the outward stroke of the rack bar and then a second Sprague gear catches on the inward stroke of the rack gear bar. While the first Sprague gear is catching (driving), the second Sprague gear is slipping (idling); and, then while the second Sprague gear is driving, the first Sprague gear is idling. A common power output gear having a common power output shaft mechanically connects the two Sprague gears so that they operate in unison, providing power output on both the inward and outward strokes of the rack bar in order to provide continuous power output rotation in a single direction that is capable of powering a rotary electrical generator or alternator and is capable of providing mechanical rotary motive force for any means of transportation such as the wheels of an automobile or to provide rotational mechanical power output for any purpose for which rotational mechanical power output may be used.

IPC 8 full level

F03G 7/00 (2006.01)

CPC (source: EP)

F03G 7/00 (2013.01)

Citation (search report) See references of WO 2011083347A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2011083347 A1 20110714; EP 2513478 A1 20121024

DOCDB simple family (application)

IB 2009007766 W 20091215; EP 09797155 A 20091215