(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 853 777 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(15) Correction information:
Corrected version no 1 (W1 A1)
Corrections, see
Bibliography INID code(s) 71

(48) Corrigendum issued on:
08.07.2015 Bulletin 2015/28

(43) Date of publication:
01.04.2015 Bulletin 2015/14

(21) Application number: **12877450.2**

(22) Date of filing: **23.05.2012**

(51) Int Cl.:
F16H 37/02 *(2006.01)*

(86) International application number:
PCT/JP2012/063174

(87) International publication number:
WO 2013/175583 (28.11.2013 Gazette 2013/48)

(84) Designated Contracting States:
AL 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 RS SE SI SK SM TR
Designated Extension States:
BA ME

(71) Applicant: **TOYOTA JIDOSHA KABUSHIKI KAISHA**
Toyota-shi, Aichi-ken, 471-8571 (JP)

(72) Inventors:
- **KOBAYASHI, Daisuke**
  Toyota-shi, Aichi-ken, 471-8571 (JP)
- **YOSHIDA, Michio**
  Toyota-shi, Aichi-ken, 471-8571 (JP)
- **YOSHINO, Hirotsugu**
  Toyota-shi, Aichi-ken, 471-8571 (JP)
- **OSADA, Tomoe**
  Toyota-shi, Aichi-ken, 471-8571 (JP)

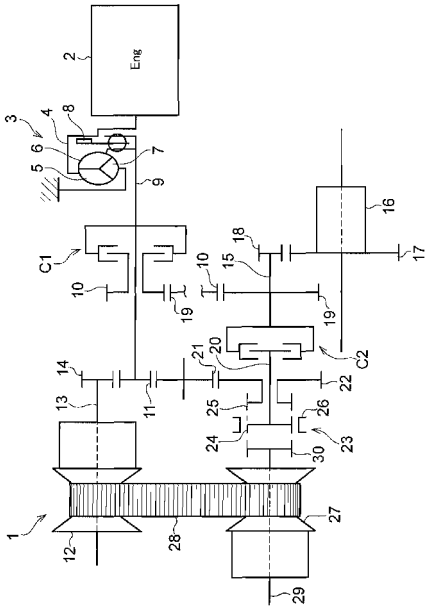
(74) Representative: **Kuhnen & Wacker**
Patent- und Rechtsanwaltsbüro
Prinz-Ludwig-Straße 40A
85354 Freising (DE)

(54) **POWER TRANSMISSION DEVICE FOR VEHICLE**

(57) A power transmission unit for a vehicle is provided. The power transmission unit is applied to a vehicle comprising: a continuously variable transmission that is adapted to alter a speed ratio continuously, and that is disposed between an input shaft to which a torque of a prime mover is inputted and an output shaft that outputs the torque; a first gear train that transmits the torque when propelling the vehicle in the forward direction; and a second gear train that transmits the torque when propelling the vehicle in the backward direction and that is arranged parallel to the first gear train. The power transmission unit is comprised of: a first clutch device that selectively enables and disables a torque transmitting route from the input shaft to the output shaft via the first gear train to transmit the torque therethrough; a dog clutch that switches the torque transmitting route from the input shaft to the output shaft between a continuously variable speed change route in which the torque is transmitted through the continuously variable transmission and a reverse route in which the torque is transmitted through the second gear train; and a second clutch device that selectively enables and disables both of the continuously variable speed change route and the reverse route to transmit the torque to the input shaft or the output shaft. The first clutch device and the second clutch device are separately disposed on any of the input shaft and the output shaft in a manner to be situated at different axial positions on those shafts.

EP 2 853 777 A8

Fig. 1


Eng
2
3
4
8
6
7
5
9
16
18
17
C1
10
15
10
19
19
20
21
C2
14
22
13
11
25
26
24
30
23
1
27
12
28
29