

Title (en)

HYBRID DRIVE UNIT

Title (de)

HYBRID-ANTRIEBSVORRICHTUNG

Title (fr)

UNITÉ D'ENTRAÎNEMENT HYBRIDE

Publication

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Application

EP 21794791 A 20211015

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Abstract (en)

[origin: WO2022111910A1] The invention relates to a hybrid drive unit (1, 101) comprising an internal combustion engine (2), an electric machine (3) and a transmission, the transmission having an input shaft (5) and at least a first and a second countershaft (V1, V2), the internal combustion engine (2) being able to be coupled directly to the input shaft (5) via a disconnect clutch (4), wherein seven shiftable pairs of gears (RP1, RP2, RP3, RP4, RP5, RP6, RP7) are provided, each of which includes a gear wheel (Z1, Z3, Z5, Z8, Z10, Z12) arranged coaxially to the input shaft (5), wherein the first pair of gears (RP1) includes a first gear wheel (Z1) which is an idler gear and is arranged coaxially to the input shaft (5) as well as a second gear wheel (Z2) which is an idler gear and is arranged coaxially to the first countershaft (V1), wherein the electric machine (3) is connected to the first pair of gears (RP1) in such a way that torques can be transmitted from the electric machine (3) to the transmission via the first pair of gears (RP1), wherein the first shiftable pair of gears (RP1), a first shifting element level (SE1), the second shiftable pair of gears (RP2), the third shiftable pair of gears (RP3), the fifth shiftable pair of gears (RP5), a second shifting element level (SE2), the sixth shiftable pair of gears (RP6), and the seventh shiftable pair of gears (RP7) are arranged one behind the other in said order in an axial direction (a), the third and fourth shiftable pairs of gears (RP3, RP4) being arranged on the same axial gear level (RE3).

IPC 8 full level

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