Title (en)

TRANSPORT DEVICE

Title (de

TRANSPORTEINRICHTUNG

Title (fr)

DISPOSITIF DE TRANSPORT

Publication

EP 4066354 A1 20221005 (DE)

Application

EP 20816912 A 20201125

Priority

- AT 510352019 A 20191127
- EP 2020083275 W 20201125

Abstract (en

[origin: WO2021105155A1] The aim of the invention is to provide a transport device (1) in the form of a planar motor with at least one transport segment (2) which forms a transport plane (3) and with at least one transport unit which is provided with different pole pitches for at least one first magnet group (MGa) and at least one second magnet group (MGb) that can be moved at least two-dimensionally on the transport plane (3), said transport device facilitating a more efficient operation. This is achieved in that the drive coils (AS1) of a first coil group (SG1) of the transport segment (2) are arranged at an average first coil distance from the first magnet group (MGa) of the transport unit in a normal direction onto the transport plane (3), and the drive coils (AS2) of a second coil group (SG2) are arranged at an average second coil distance from the second magnet group (MGb) of the transport unit in a normal direction onto the transport plane (3), said second average coil distance being greater than the first average coil distance, wherein the pole pitch of the first magnet group (MGb) is smaller than the pole pitch of the second magnet group (MGb) on the transport unit.

IPC 8 full level

H02K 1/14 (2006.01); H02K 41/03 (2006.01)

CPC (source: AT EP US)

B65G 54/02 (2013.01 - US); H02K 1/14 (2013.01 - EP); H02K 16/025 (2013.01 - US); H02K 41/02 (2013.01 - US); H02K 41/031 (2013.01 - AT EP US); H02K 2201/18 (2013.01 - AT EP); H02K 2213/03 (2013.01 - EP US)

Designated contracting state (EPC)

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 state (EPC)

BA ME

DOCDB simple family (publication)

WO 2021105155 A1 20210603; AT 523217 A1 20210615; CN 114747116 A 20220712; EP 4066354 A1 20221005; JP 2023507712 A 20230227; US 2022416633 A1 20221229

DOCDB simple family (application)

EP 2020083275 W 20201125; AT 510352019 A 20191127; CN 202080082671 A 20201125; EP 20816912 A 20201125; JP 2022530292 A 20201125; US 202017780418 A 20201125