

Title (en)
PORTABLE EMBEDDED DIRECT-CURRENT ELECTRIC HOIST

Title (de)
TRAGBARES EINGEBETTETES ELEKTRISCHES GLEICHSTROMHEBEZEUG

Title (fr)
TREUIL ÉLECTRIQUE À COURANT CONTINU EMBARQUÉ PORTABLE

Publication
EP 4001200 A1 20220525 (EN)

Application
EP 21173137 A 20210510

Priority
CN 202011325016 A 20201123

Abstract (en)
Provided is a portable embedded direct-current electric hoist, comprising a permanent magnet brushless direct-current motor (7), a controller (8), left and right end plates (2, 6), a rope drum (5), a first reducer (4), and a second differential transmission device (1), wherein the left and right end plates (2, 6) are fixedly connected into a whole through a connecting rod (3), and the rope drum (5) is rotatably arranged on the left and right end plates (2, 6); a built-in motor base (23) fixed to the right end plate (6) is provided in the rope drum (5), the permanent magnet brushless direct-current motor (7) and the first reducer (4) are fixed, in an abutting manner, to the built-in motor base (23), so that the permanent magnet brushless direct-current motor (7) and the first reducer (4) are embedded in the rope drum (5); the second differential transmission device (1) is fixed to the left end plate (2) and is connected to the first reducer (4) through a transmission shaft (16). During operation, the permanent magnet brushless direct-current motor drives, through the first reducer and the transmission shaft, the second differential transmission device to rotate, and the second differential transmission device drives the rope drum to rotate. After the above structure is employed, there are advantages of a simple and reasonable structure, flexible and easy lifting, a small volume, high transmission efficiency, a good braking effect, safe and reliable use, and so on.

IPC 8 full level
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CPC (source: CN EP)
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Citation (search report)

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- [I] CN 206156640 U 20170510 - ZHAO JIANXIN
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CN115258991A; CN115849231A

Designated contracting state (EPC)
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