

Title (en)
DREDGER

Title (de)
BAGGER

Title (fr)
BATEAU DE TRAVAIL DE DRAGAGE

Publication
EP 3985176 A4 20230621 (EN)

Application
EP 20822136 A 20200609

Priority
• JP 2019109830 A 20190612
• JP 2020022681 W 20200609

Abstract (en)
[origin: EP3985176A1] A dredger is provided which includes a bottomed tubular main frame (11), a raise/lower body (12) that is vertically slidably fitted around an outer periphery of the main frame, a pair of scoop plates (13) that are axially supported on lower end parts of the raise/lower body so that sediment at the water bottom can be scooped up by opening and closing the open lower end of the raise/lower body, an open/close drive device that drives the two scoop plates to open and close, a sand discharge pipe (P) that is fixed within the main frame so as to have one end opening on a bottom wall (11b) of the main frame and have the other end connected to an upstream end of the sediment transport pipe (8), and a check valve (15) that prevents reverse flow of the sediment pushed out from the sand discharge pipe toward the sediment transport pipe side, the excavated sediment scooped up by the scoop plates being forcibly pushed into the sand discharge pipe due to the raise/lower body (12) being driven to rise with respect to the main frame (11) in a state in which the scoop plate is closed. This enables the degree of freedom in design of a bucket device to be enhanced, and a sufficient pushing amount can be ensured without especially increasing the size of the scoop plate.

IPC 8 full level
E02F 3/47 (2006.01); **E02F 3/88** (2006.01); **E02F 3/92** (2006.01)

CPC (source: CN EP)
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Citation (search report)
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• [A] US 3693274 A 19720926 - PICCAGLI UGO
• [A] US 5540005 A 19960730 - LYNCH ROBERT P [US]
• [A] US 4882859 A 19891128 - BOLLINGER KARL [FR]
• See references of WO 2020250886A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 3985176 A1 20220420; **EP 3985176 A4 20230621**; **EP 3985176 B1 20240131**; CN 113950553 A 20220118; CN 113950553 B 20230307; JP 7186987 B2 20221212; JP WO2020250886 A1 20201217; WO 2020250886 A1 20201217

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EP 20822136 A 20200609; CN 202080042317 A 20200609; JP 2020022681 W 20200609; JP 2021526093 A 20200609