

Title (en)

ARTICULATED APPARATUS FOR TRANSFERRING FLUIDS

Publication

**EP 0020267 B1 19840808 (FR)**

Application

**EP 80400753 A 19800528**

Priority

- FR 7913463 A 19790528
- FR 8001430 A 19800123

Abstract (en)

[origin: CA1141621A] An articulated fluid loading arm especially suited for transferring petroleum from a storage or loading terminal to a marine tanker, and for returning vapor from the tanker to the terminal, comprising a support boom pivotally mounted on the deck of the terminal, a pair of fluid conduits extending along the boom from risers at the terminal, and a dual flow-passage drop-pipe assembly suspended from an outboard end of the boom. The drop-pipe assembly comprises a pair of upper conduit members, a pair of lower conduit members and a pair of intermediate conduit members pivotally interconnected by a plurality of knee joints and swivel joints into a pair of articulated diamond-shaped structures. One set of upper, intermediate and lower conduit members comprises an assembly for the transfer of fluid from the terminal to the tanker, and the other set of conduit members provides an assembly for the return of vapors from the tanker to the terminal. A support cable extends from a tanker connection means on the lower end of the drop-pipe assembly to the outboard end of the boom and then along the boom to a winch for lowering, raising and supporting the drop pipe assembly.

IPC 1-7

**B67D 5/06**

IPC 8 full level

**B67D 9/02** (2010.01)

CPC (source: EP US)

**B67D 9/02** (2013.01 - EP US); **Y10T 137/8807** (2015.04 - EP US)

Cited by

FR2793235A1; WO0066484A1; EP0167642A1; AU759005B2; WO0104041A2; FR2796375A1

Designated contracting state (EPC)

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**EP 0020267 A1 19801210; EP 0020267 B1 19840808**; CA 1141621 A 19830222; DE 3068866 D1 19840913; DK 151567 B 19871214; DK 151567 C 19880718; DK 226580 A 19801129; FR 2474012 A2 19810724; FR 2474012 B2 19860131; JP S55163200 A 19801218; JP S6119520 B2 19860517; NO 157972 B 19880314; NO 157972 C 19880622; NO 801557 L 19801201; US 4388948 A 19830621

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