

Title (en)

DEVICE FOR CONVEYING DENSE SUBSTANCES.

Title (de)

VORRICHTUNG ZUR FÖRDERUNG VON DICKSTOFFEN.

Title (fr)

DISPOSITIF DE TRANSPORT DE LIQUIDES EPAIS.

Publication

EP 0539373 B1 19941130

Application

EP 91903812 A 19910216

Priority

- DE 4022357 A 19900713
- EP 9100304 W 19910216

Abstract (en)

[origin: WO9201158A1] The invention relates to a device for conveying dense substances, muds and the like with a dense substance pump (14), a conveyor line (12) connected to the pressure side of the dense substance pump (14) and a retainer (10) arranged in the conveyor line (12), allowing the conveyed substance to advance in the conveying direction and at least partly preventing travel in the opposite direction. According to the invention, the retainer (10) has an aperture (32) automatically widening elastically under the effect of the conveyed substance flowing in the forward direction and narrowing if the substance stops or goes into counter-flow which is preferably limited by several sprung blades (30) tensioned on one side in the region of the inner surface of the conveyor line (12) and extending at their free ends obliquely in the conveying direction to the inside of the conveyor line (12).

IPC 1-7

F04B 15/02; F04B 21/02

IPC 8 full level

F04B 15/02 (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP US)

F04B 15/02 (2013.01 - EP US); **F04B 53/1067** (2013.01 - EP US); **F04B 53/1077** (2013.01 - EP US); **Y10S 417/90** (2013.01 - EP US);
Y10T 137/7854 (2015.04 - EP US); **Y10T 137/7885** (2015.04 - EP US)

Cited by

DE102007058886A1

Designated contracting state (EPC)

DE IT NL

DOCDB simple family (publication)

WO 9201158 A1 19920123; DE 4104693 A1 19920116; DE 59103717 D1 19950112; EP 0539373 A1 19930505; EP 0539373 B1 19941130;
JP 3140771 B2 20010305; JP H05507985 A 19931111; US 5340291 A 19940823

DOCDB simple family (application)

EP 9100304 W 19910216; DE 4104693 A 19910215; DE 59103717 T 19910216; EP 91903812 A 19910216; JP 50397791 A 19910216;
US 96191893 A 19930113