Title (en)

Two-member connecting device

Title (de)

Zweiteilige Verbindungsvorrichtung

Title (fr)

Dispositif de connexion à deux éléments

Publication

EP 2206837 A2 20100714 (EN)

Application

EP 10150023 A 20100104

Priority

- JP 2009001590 A 20090107
- JP 2009001604 A 20090107

Abstract (en)

A pin inserting/withdrawing mechanism (18) which is provided between left and right first brackets (12), (13) is constituted by a hydraulic cylinder (19) disposed in such a manner as to be spaced apart from left and right connecting pins (16), (17) so as to be capable of extending and contracting in the same direction as the axis of the left and right connecting pins (16), (17); a floating link (20) disposed in a floating state between the left and right first brackets (12), (13); a left link (21) for connecting the left connecting pin (16) and the hydraulic cylinder (19) by means of the floating link (20); and a right link (24) for connecting the right connecting pin (17) and the hydraulic cylinder (19) by means of the floating link (20). In consequence, the left and right connecting pins (16), (17) respectively connected to one end sides (21A), (24A) of these left and right links (21), (24) move in the left-right direction in correspondence with the extension and contraction of the hydraulic cylinder (19). As a result, the left and right connecting pins (16), (17) can be smoothly inserted into or withdrawn from the left and right first brackets (12), (13) and the left and right second brackets (14), (15).

IPC 8 full level

E02F 3/38 (2006.01); **F16B 1/00** (2006.01)

CPC (source: EP)

E02F 3/3636 (2013.01); **E02F 3/3663** (2013.01); **E02F 3/369** (2013.01); **E02F 3/38** (2013.01)

Citation (applicant)

JP 2005249185 A 20050915 - KOBELCO CONSTR MACHINERY LTD

Cited by

US11149403B2; EP2581500A4; EP3779051A1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2206837 A2 20100714; **EP 2206837 A3 20170712**; **EP 2206837 B1 20211020**; CN 101768983 A 20100707; CN 101768983 B 20130828; KR 101633026 B1 20160623; KR 20100081945 A 20100715

DOCDB simple family (application)

EP 10150023 A 20100104; CN 201010002303 A 20100105; KR 20100000796 A 20100106