

Title (en)

Wiresaw arranged for conducting an endless diamond wire

Title (de)

Drahtsäge, die zum Führen eines Endlosdiamantdrahts eingerichtet ist

Title (fr)

Scie à fil agencée pour réaliser un fil de diamant sans fin

Publication

EP 2572848 A1 20130327 (EN)

Application

EP 11007757 A 20110923

Priority

EP 11007757 A 20110923

Abstract (en)

A wire saw comprising: - a diamond wire (w); - two guide liner pipes (1a, 1b) each provided with a longitudinally extending wagon (2) with a motorized tractor (3) arranged to pull said wagon (2) along a guide rail (4) within said guide liner pipe (2a, 2b); - wherein each guide liner pipe (1a, 1b) comprises oppositely facing slits (5a, 5b) to allow said diamond wire (w) to run to an opposite of said guide liner pipes (1b, 1a); - wherein each wagon (2) is provided with a front wire wheel (6a, 6b) and a rear wire wheel (7a, 7b) arranged to guide the diamond wire (w) internally between themselves in each guide liner pipe (1a, 1b), and wherein said diamond wire (w) runs in its cutting direction across between said guide liner pipes (1a, 1b) from one of said front wire wheels (6a, 6b) to an opposite of said front wire wheels (6b, 6a); - wherein at least said two front wire wheels (6a, 6b) are driven each by its separate motor (8a, 8b) and arranged to drive the diamond wire (w); - and wherein said diamond wire (w) runs in its return direction across between said guide liner pipes (1b, 1a) between the opposite rear wire wheel (7b) back to said rear wire wheel (7a); - wherein each wagon (2) comprises a telescopingly extendable stem (9), each with a linear actuator (10) arranged to tighten said rear wire wheel (7a, 7b) in a backward direction relative to said front wire wheel (6a, 6b) in order to put said diamond wire (w) under tension.

IPC 8 full level

B28D 1/08 (2006.01)

CPC (source: EP)

B28D 1/088 (2013.01)

Citation (applicant)

- JP H06146285 A 19940527 - SHIMIZU CONSTRUCTION CO LTD
- US 558483 A 18960421
- US 2050761 A 19360811 - NEWSOM JOHN B
- US 2577545 A 19511204 - STRATTON HARRY E
- US 454712 A 18910623
- US 1735012 A 19291112 - LYON RICH JOHN
- JP H05332034 A 19931214 - CONCRETE KOORING KK

Citation (search report)

- [ID] JP H06146285 A 19940527 - SHIMIZU CONSTRUCTION CO LTD
- [A] JP 2007152795 A 20070621 - HOKUTO MFG
- [A] JP 2002227429 A 20020814 - DAIICHI DIAMOND KOJI KK

Cited by

CN110777804A

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2572848 A1 20130327; EP 2572848 B1 20150121; HK 1183646 A1 20140103

DOCDB simple family (application)

EP 11007757 A 20110923; HK 13110998 A 20130926