

Title (en)  
Slit wall digging device with direction control system

Title (de)  
Tiefbauvorrichtung zum Herstellen von Schlitzten im Boden mit Lenk- und Steuereinrichtung

Title (fr)  
Benne de forage pour creuser des tranchées dans le sol avec commande de direction

Publication  
**EP 1703023 A1 20060920 (DE)**

Application  
**EP 05006038 A 20050318**

Priority  
EP 05006038 A 20050318

Abstract (en)  
The device has a soil erosion device and a control device (1) with two pairs of control flaps supported at a framework (12) and two guide wheels (5). The flaps and a servo-jack align the tool in a desired position when the tool is deviated. Force and an adjustment path of the jack are distributed on the flaps. The wheels are pivoted at a pivot arm such that the digging device is shifted laterally during the formation of slots.

IPC 8 full level  
**E02D 17/13** (2006.01); **E02F 3/20** (2006.01); **E02F 3/47** (2006.01)

CPC (source: EP KR US)  
**E02D 17/13** (2013.01 - EP US); **E02F 3/205** (2013.01 - EP US); **E02F 5/02** (2013.01 - KR)

Citation (applicant)  
• DE 3615068 C1 19871008 - DYCKERHOFF & WIDMANN AG  
• EP 0518298 A1 19921216 - BAUER SPEZIALTIEFBAU [DE]

Citation (search report)  
• [XAY] DE 19838513 A1 19990401 - ZEILINGER WOLFGANG DIPL ING [DE]  
• [XAY] DE 4309233 C1 19940721 - LEFFER STAHL & APP [DE]  
• [XY] US 3513572 A 19700526 - NOVET GABRIEL  
• [DY] DE 3615068 C1 19871008 - DYCKERHOFF & WIDMANN AG  
• [DA] EP 0518298 A1 19921216 - BAUER SPEZIALTIEFBAU [DE]  
• [A] EP 0593355 A1 19940420 - DU SOL COMP [FR]  
• [A] DE 69821726 T2 20041202 - CIE DU SOL NANTERRE [FR]  
• [YA] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 03 28 April 1995 (1995-04-28)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 457 (M - 1181) 20 November 1991 (1991-11-20)

Cited by  
DE102007035591B3; EP2636799A1; EP2369063A1; FR2957948A1; CN113293775A; US7637038B2; US12043974B2; WO2020114656A1; US7661209B2; US9074341B2; EP2020462A2; EP3701091B1

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DE FR IT

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DOCDB simple family (application)  
**EP 05006038 A 20050318**; CA 2537970 A 20060228; CN 200610068237 A 20060320; JP 2006076186 A 20060320; KR 20060021635 A 20060308; RU 2006106485 A 20060302; SG 200601728 A 20060316; US 37601206 A 20060315