

Title (en)  
FORMING A SHAFT FOR AN UNDERGROUND MINE

Title (de)  
BILDEN EINES SCHAFTS FÜR EINE UNTERTAGEMINE

Title (fr)  
FORMATION D'UN PUIITS POUR UNE MINE SOUTERRAINE

Publication  
**EP 2449214 A4 20130123 (EN)**

Application  
**EP 10793425 A 20100630**

Priority  
• AU 2010000820 W 20100630  
• AU 2009903054 A 20090630

Abstract (en)  
[origin: WO2011000037A1] In forming a mine shaft for an underground mine, earth excavated by a boring machine (21) is transported upwardly by handling unit (22) to a transfer station (33) where it is transferred into skips 36 which are raised and lowered along skip guides 38 within the shaft hole (19) for transport of the excavated material to an earth surface region. Transfer station (33) is moved downwardly as excavation progresses.

IPC 8 full level  
**E21D 1/03** (2006.01)

CPC (source: EP)  
**E21D 1/03** (2013.01)

Citation (search report)  
• [Y] DE 1608290 A1 19701210 - WESTFAELISCHE BERGGEWERKSCHAFT, et al  
• [YD] US 3965995 A 19760629 - SUGDEN DAVID B  
• [A] JP 2003003780 A 20030108 - OHBAYASHI CORP, et al  
• See references of WO 2011000037A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2011000037 A1 20110106**; AU 2010268761 A1 20120119; AU 2010268761 B2 20120726; BR PI1014138 A2 20190409; BR PI1014138 B1 20191105; CA 2765758 A1 20110106; CA 2765758 C 20130402; CL 2011003356 A1 20120622; CN 102472101 A 20120523; CN 102472101 B 20140312; DE 10793425 T1 20121108; DE 10793425 T8 20130425; DE 202010017762 U1 20120717; EA 021979 B1 20151030; EA 201270083 A1 20120629; EP 2449214 A1 20120509; EP 2449214 A4 20130123; EP 2449214 B1 20201230; MX 2012000112 A 20120229; PE 20121376 A1 20121015; PL 2449214 T3 20210823

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