

Title (en)  
CUTTER HEAD AND ROCK EXCAVATOR

Title (de)  
SCHNEIDKOPF UND AUSBRECHVORRICHTUNG FÜR FELSGESTEIN

Title (fr)  
TETE DE COUPE ET EXCAVATRICE DE ROCHE

Publication  
**EP 1344894 A1 20030917 (EN)**

Application  
**EP 01271488 A 20011217**

Priority  
• JP 0111043 W 20011217  
• JP 2000385172 A 20001219

Abstract (en)  
The present invention relates to a cutter head and a rock excavator provided therewith utilized for excavating base rocks in free section to proceed excavating a mine gallery, a tunnel, a shaft and the like. <??>In the conventional excavator having the construction in which the base rock is cut against the tensile strength of the base rock by a disk roller cutter, the cutter receives reaction from the base rock in the vicinity of coming in contact with rocks to be pushed back to make it difficult to form a deep cut-in in the base rock. Therefore, two kinds of disk roller cutters (3, 4) having different cutting-lines with a direction of a support shaft and a position of a disk edge differentiated are arranged on a cutter head drum (2), and one is a disk roller cutter for undercut for cutting off the base rock whereas the other is a disk roller cutter for scraper for crushing the base rock to constitute a cutter head (1). <IMAGE>

IPC 1-7  
**E21D 9/08**

IPC 8 full level  
**E21D 9/08** (2006.01); **E21C 25/18** (2006.01); **E21D 9/10** (2006.01)

CPC (source: EP US)  
**E21C 25/18** (2013.01 - EP US); **E21D 9/1013** (2013.01 - EP US)

Citation (search report)  
See references of WO 0250401A1

Cited by  
CN107208479A; DE112009000325B4; US8690262B2; WO2009100469A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1344894 A1 20030917**; AU 2266202 A 20020701; JP 2002188394 A 20020705; US 2003230925 A1 20031218; WO 0250401 A1 20020627

DOCDB simple family (application)  
**EP 01271488 A 20011217**; AU 2266202 A 20011217; JP 0111043 W 20011217; JP 2000385172 A 20001219; US 46332903 A 20030618