

Title (en)  
PIERCING MILL

Title (de)  
LOCHWALZWERK

Title (fr)  
LAMINOIR PERCEUR

Publication  
**EP 1022068 A4 20020116 (EN)**

Application  
**EP 98947859 A 19981014**

Priority  
• JP 9804630 W 19981014  
• JP 28002097 A 19971014

Abstract (en)  
[origin: WO9919093A1] A piercing mill capable of producing thin-walled pipes and improving a work efficiency of a disc roll position adjustment while securing sufficiently support rigidity of a disc roll, comprising a mill housing, a pair of disc frames (6) capable of turning toward a pass line and being opened, and a pair of upper and lower sliding frames (8) capable of sliding on the inner surface of the disc frames, wherein a skew angle of the disc roll (4) is set when the sliding frames (8) are slid in mutually opposite directions. This piercing mill can improve a work efficiency of the position adjustment by changing the disc roll and is effective in expanding the range of thin-walled tubes to be produced because setting of a skew angle of the disc roll can be made easily and reliably.

IPC 1-7  
**B21B 19/04**

IPC 8 full level  
**B21B 19/04** (2006.01); **B21B 31/08** (2006.01)

CPC (source: EP)  
**B21B 19/04** (2013.01); **B21B 31/08** (2013.01)

Citation (search report)  
• [X] US 5479805 A 19960102 - KOENEN PAUL [DE], et al  
• [A] US 4488419 A 19841218 - QUAMBUSCH ALBERT [DE], et al  
• [AD] PATENT ABSTRACTS OF JAPAN vol. 012, no. 287 (E - 643) 5 August 1988 (1988-08-05)  
• See references of WO 9919093A1

Cited by  
CN107206441A; CN104098257A; CN111842742A; CN112024607A; WO2016128923A1

Designated contracting state (EPC)  
DE

DOCDB simple family (publication)  
**WO 9919093 A1 19990422**; EP 1022068 A1 20000726; EP 1022068 A4 20020116; JP 3239896 B2 20011217

DOCDB simple family (application)  
**JP 9804630 W 19981014**; EP 98947859 A 19981014; JP 2000515711 A 19981014