

Title (en)  
MULTI-PASS GRINDING METHOD

Title (de)  
MEHRFACH-DURCHLAUF SCHLEIFVERFAHREN

Title (fr)  
PROCEDE DE MEULAGE A PASSES MULTIPLES

Publication  
**EP 1058595 A4 20020821 (EN)**

Application  
**EP 99909605 A 19990225**

Priority  
• US 9904106 W 19990225  
• US 7607198 P 19980226

Abstract (en)  
[origin: WO9943469A1] A multi-pass grinding method for fabricating an endodontic instrument. A tapered rod (10) is sucessively advanced past a rotating grinding wheel (12) to remove layers (14, 16, 18, 20) of material from the rod (10) until attaining a desired flute depth. The method is characterized by relatively shallow cutting depths, relatively high feed rates and low grinding wheel wear. The method reduces the process time and operator supervision required for fabricating nickel-titanium endodontic instruments. A further process is disclosed for automatically compensating for wear on the grinding wheel (12) so that periodic recalibration of the grinding wheel (12) may be eliminated or reduced.

IPC 1-7  
**B24B 19/04**; **A61C 5/02**; **B24B 19/02**

IPC 8 full level  
**A61C 5/02** (2006.01); **A61C 5/42** (2017.01); **B24B 1/00** (2006.01); **B24B 17/10** (2006.01); **B24B 19/04** (2006.01); **B24B 27/00** (2006.01); **B24B 51/00** (2006.01)

CPC (source: EP)  
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Citation (search report)  
• [X] US 5464362 A 19951107 - HEATH DEREK E [US], et al  
• [X] US 4871312 A 19891003 - HEATH DEREK E [US]  
• [X] DE 3239914 A1 19840503 - WALTER GMBH MONTANWERKE [DE]  
• See references of WO 9943469A1

Designated contracting state (EPC)  
DE FR

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**WO 9943469 A1 19990902**; AU 2877499 A 19990915; EP 1058595 A1 20001213; EP 1058595 A4 20020821; JP 2002504440 A 20020212

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