

Title (en)
MAGNETORHEOLOGICAL POLISHING DEVICES AND METHODS

Title (de)
MAGNETORHEOLOGISCHE POLIERVORRICHTUNGEN UND VERFAHREN

Title (fr)
DISPOSITIFS ET PROCEDES DE POLISSAGE MAGNETORHEOLOGIQUE

Publication
EP 0703847 B1 20020410 (EN)

Application
EP 94919329 A 19940603

Priority

- BY 863 A 19931209
- US 9406209 W 19940603
- US 7181393 A 19930604

Abstract (en)
[origin: WO9429077A1] A method of polishing an object is disclosed. In one embodiment, as shown in the figure, the method comprises the steps of creating a polishing zone (10) within a magnetorheological fluid (2); determining the characteristics of the contact between the object and the polishing zone necessary to polish the object (4); controlling the consistency of the fluid (2) in the polishing zone (10); bringing the object (4) into contact with the polishing zone (10) of the fluid (2); and moving at least one of said object (4) and said fluid (2) with respect to the other. Also disclosed is a polishing device (1). In one embodiment, the device comprises a magnetorheological fluid (2), a means (6) for inducing a magnetic field, and a means for displacing the object (4) to be polished or the means (6) for inducing a magnetic field relative to one another.

IPC 1-7
B24B 39/02; **B24B 1/00**

IPC 8 full level
B24B 51/00 (2006.01); **B24B 1/00** (2006.01); **B24B 31/00** (2006.01); **B24B 31/112** (2006.01); **B24B 37/04** (2012.01); **B24B 39/00** (2006.01); **B24B 39/02** (2006.01); **C09G 1/00** (2006.01)

CPC (source: EP KR)
B24B 1/00 (2013.01 - KR); **B24B 1/005** (2013.01 - EP); **B24B 37/04** (2013.01 - EP); **B24B 39/02** (2013.01 - KR)

Cited by
CN109623507A; CN102284890A; CN108789117A; CN104308671A; CN112536649A; WO2019243914A1; US9102030B2; US9707658B2

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

DOCDB simple family (publication)
WO 9429077 A1 19941222; AT E215869 T1 20020415; CA 2163671 A1 19941222; CA 2163671 C 20051025; CA 2497731 A1 19941222; CA 2497731 C 20060207; CA 2497732 A1 19941222; CA 2497732 C 20110301; DE 69430370 D1 20020516; DE 69430370 T2 20021212; EP 0703847 A1 19960403; EP 0703847 A4 19970709; EP 0703847 B1 20020410; JP 2005040944 A 20050217; JP 4741212 B2 20110803; JP H08510695 A 19961112; KR 100335219 B1 20021107; KR 960702786 A 19960523

DOCDB simple family (application)
US 9406209 W 19940603; AT 94919329 T 19940603; CA 2163671 A 19940603; CA 2497731 A 19940603; CA 2497732 A 19940603; DE 69430370 T 19940603; EP 94919329 A 19940603; JP 2004239946 A 20040819; JP 50193695 A 19940603; KR 19950705488 A 19951204