

Title (en)
Device for comminuting biological samples

Title (de)
Vorrichtung zum Zerkleinern von biologischem Probematerial

Title (fr)
Dispositif pour broyer des échantillons biologiques

Publication
EP 1764154 A1 20070321 (DE)

Application
EP 05020207 A 20050916

Priority
EP 05020207 A 20050916

Abstract (en)
The device has an axially displaceable spindle (14) with a coupling end (18), arranged in a sample container. An operating end of the spindle contacts with a base of the container in an idle condition of the spindle. A cutting mechanism (16) is formed in the shape of a propeller so that a propelling force is exerted on the propeller in the direction of the coupling end, during the rotation of the spindle in the operating direction.

IPC 8 full level
B02C 18/10 (2006.01); **B02C 18/24** (2006.01)

CPC (source: EP US)
B02C 18/10 (2013.01 - EP US); **B02C 18/24** (2013.01 - EP US)

Citation (search report)

- [AD] US 2004035964 A1 20040226 - ROGGERO GIANMARCO [IT]
- [A] US 5829696 A 19981103 - DESTEFANO MICHELLE S [US], et al
- [A] US 6517561 B1 20030211 - PHILLIPS ROBERT E [US]
- [A] US 4249879 A 19810210 - ANDERS DIETMAR [DE], et al

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CN102438754A; CN107185665A; US9700857B1; US10118141B2; US10850243B2; US11944945B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
WO 2007033748 A1 20070329; AT E385853 T1 20080315; AU 2006294111 A1 20070329; AU 2006294111 B2 20100805; CA 2622138 A1 20070329; CA 2622138 C 20131217; CN 101247891 A 20080820; CN 101247891 B 20100519; DE 502005002844 D1 20080327; EP 1764154 A1 20070321; EP 1764154 B1 20080213; ES 2299933 T3 20080601; US 2008208234 A1 20080828; US 7980500 B2 20110719

DOCDB simple family (application)
EP 2006008329 W 20060825; AT 05020207 T 20050916; AU 2006294111 A 20060825; CA 2622138 A 20060825; CN 200680031019 A 20060825; DE 502005002844 T 20050916; EP 05020207 A 20050916; ES 05020207 T 20050916; US 6697906 A 20060825