

Title (en)

RECEIVING CHUCK FOR OPTICAL COMPONENTS FOR THE PURPOSE OF PRECISION-GRINDING AND/OR POLISHING

Title (de)

AUFAHMEFUTTER FÜR OPTISCHE BAUTEILE ZUM FEINSCHLEIFEN UND/ODER POLIEREN

Title (fr)

SUPPORT RECEPTEUR POUR PIECES OPTIQUES DESTINEES A ETRE RECTIFIEES ET/OU POLIES

Publication

**EP 1165286 B1 20031217 (DE)**

Application

**EP 01913524 A 20010119**

Priority

- DE 0100241 W 20010119
- DE 10003291 A 20000127

Abstract (en)

[origin: US2002031993A1] A chuck for optical components for fine grinding and/or polishing, has a plurality of supporting elements (9) of elastic material for the components and an arrangement for feeding or discharging air relative to the rear side of each supporting element. The chuck has a basic body (1) with a spindle shank (2) having a central bore (3) and a cover part (6) for accommodating the supporting elements. The basic body (1) is designed in a pot shape (5) with an encircling rim (4), and the cover part (6), provided with a flat base area, is put onto the rim (4) in an airtight manner. The cover top side (15) has cylindrical recesses (8) which lie symmetrically to the axis (17) of the spindle shank (2) and are designed for the insertion of the elastic supporting elements (9). Each of the recesses (8) is fluidly connected to the common pot space (5) of the basic body (1) via at least one bore (13). The elastic supporting element is designed as a hat-shaped diaphragm part (9), with an outwardly pointing hat brim (10) which rests on the base of the recess (8) and is held in a groove (11) of the recess (8) in an airtight manner via an O-ring (12). The elastic supporting element can also be inserted into a cylindrical holder (19) which is supported in the recess via a rotary bearing (21).

IPC 1-7

**B24B 13/005; B24B 41/06**

IPC 8 full level

**B24B 13/005** (2006.01); **B24B 41/06** (2012.01)

CPC (source: EP US)

**B24B 13/005** (2013.01 - EP US); **B24B 41/061** (2013.01 - EP US)

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)

**WO 0154861 A1 20010802**; AT E256528 T1 20040115; CZ 20013364 A3 20020717; CZ 294053 B6 20040915; DE 10003291 A1 20010809; DE 10003291 C2 20011122; DE 50101171 D1 20040129; EP 1165286 A1 20020102; EP 1165286 B1 20031217; JP 2003520694 A 20030708; US 2002031993 A1 20020314

DOCDB simple family (application)

**DE 0100241 W 20010119**; AT 01913524 T 20010119; CZ 20013364 A 20010119; DE 10003291 A 20000127; DE 50101171 T 20010119; EP 01913524 A 20010119; JP 2001554831 A 20010119; US 96140801 A 20010925