

Title (en)

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

Title (de)

AUFNAHMEFUTTER FÜR OPTISCHE BAUTEILE ZUM FEINSCHLEIFEN UND/ODER POLIEREN

Title (fr)

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

Publication

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Application

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Priority

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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).

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