

Title (en)  
FINE GRINDING INSTALLATION FOR LABORATORY EXPERIMENTS

Publication  
**EP 0135568 B1 19870624 (DE)**

Application  
**EP 84901059 A 19840302**

Priority  
DE 3307323 A 19830302

Abstract (en)  
[origin: WO8403453A1] In installations for fine grinding particularly of material samples for laboratory experiments, with a fixed grinding member and a rotating grinding member, arranged so as to have a surface facing another one with a small gap and through which the product to be ground is supplied, the following problem is raised: the samples have to be introduced and discharged one by one so that the work is carried out in batch process. It is also difficult to adjust accurately the grinding degree. In order to solve this problem and to carry out a continuous grinding of hard and very hard materials, as well as an adjustable grinding in relation to the grain size, the grinding members according to the present invention have on one hand a structure of a fixed cylinder body (22) and on the other hand a structure of a cylinder core (26) rotating in parallel to the shaft; between them, an annular narrow passage, preferably about half millimeter large, remains free. The product to be ground is introduced on the front side of the cylinder core, and the ground product is discharged on the other front side of the cylinder core; corresponding devices (20, 36; 21, 37, 38) are provided to this effect. The common longitudinal medial axis of both grinding members may be tipped by appropriate mechanisms (11, 12, 15) so as to assume a substantially vertical position while passing by numberless inclined position. A conical element (30) in the top surface of the cylinder core (26) may be arranged on at least one front side of the latter.

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