



EUROPEAN PATENT APPLICATION

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(54) **CONCRETE GRINDER AND CONCRETE GRINDING APPARATUS**

(57) The invention relates to the technical field of concrete grinding equipment, in particular to a concrete grinder and a concrete grinding apparatus. The concrete grinder comprises a main body, wherein the lower end of the main body is rotatably connected with a grinding disk, the outer wall of the main body is rotatably connected with a drive ring, a dust-proof cover is coaxially mounted at the lower end of the drive ring, a plurality of drive grooves are formed on the inner wall of the drive ring, and the drive ring is equipped with an adjusting assembly for locking the position of the drive ring; and the concrete grinding apparatus comprises a main body and a bracket connected thereto, wherein the bottom of the bracket is equipped with at least two sliding wheels, a mounting frame is mounted on the bracket, limiting member are mounted on the mounting frame, an lifting plate is mounted on the main body, limiting grooves are formed on the lifting plate, the limiting members are inserted in the limiting grooves in a sliding manner, and the mounting frame is connected with a locking bolt in a threaded manner. The axial direction of the locking bolt is perpendicular to the extending direction of the limiting grooves. The invention can improve the precision of the concrete grinder.

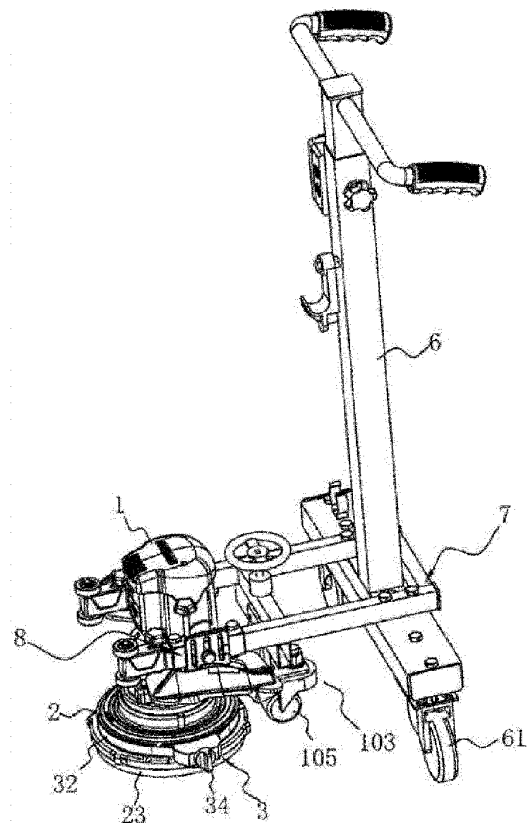


FIG.1



EUROPEAN SEARCH REPORT

Application Number

EP 22 21 2447

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 89 14 346 U1 (FESTO KG, 7300 ETTLINGEN, DE) 25 January 1990 (1990-01-25)	1, 3	INV. B24B7/18
Y	* figure 1 *	2, 4-6	B24B7/22 B24B55/04
Y	EP 2 186 600 A1 (COLLOMIX RUEHR MISCHGERAETE [DE]) 19 May 2010 (2010-05-19) * paragraph [0046]; figures 7-10 *	2, 4-6	B28D1/18 B24B55/05
			TECHNICAL FIELDS SEARCHED (IPC)
			B24B B28D
The present search report has been drawn up for all claims			

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EPO FORM 1503 03.82 (P04C01)

Place of search	Date of completion of the search	Examiner
The Hague	7 June 2023	Kornmeier, Martin
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-6

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

EP 22 21 2447

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6

Concrete grinder with adjustable dust-proof cover.

2. claims: 7-10

Concrete grinding apparatus comprising a concrete grinder of claim 1, and a bracket (6) with two sliding wheels (61) mounted to the bracket.

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 22 21 2447

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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07-06-2023

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	DE 8914346	U1	25-01-1990	NONE
15	EP 2186600	A1	19-05-2010	NONE
20				
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82