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(30) Priority: **20.05.2003 IT MI20030996**

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(54) **Rotary drum mill and relevant inner lining**

(57) Mill comprising a drum (1) which can be rotated around its longitudinal axis and is provided with an inner lining (2, 3) made of an elastomeric material comprising at least one helicoidal rib of elastomeric material which

develops along the inner surface of the drum (1) and substantially acts as a cochlea for the milling bodies and/or the material to be milled. The present invention also relates to an inner lining for this mill.

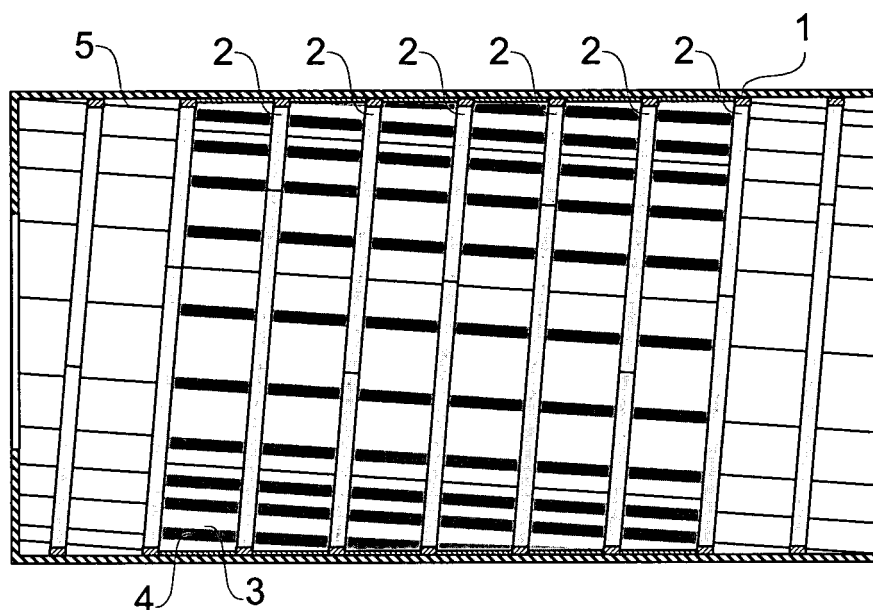


Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 04 42 5366

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	DATABASE WPI Section PQ, Week 198539 Derwent Publications Ltd., London, GB; Class P41, AN 1985-241638 XP002349433 -& SU 1 144 719 A (MONTVILA V V) 15 March 1985 (1985-03-15) * abstract * -----	1-11	B02C17/22
Y	SCHEIBE W: "100 JAHRE ROHRKUGELMUEHLE - EIN HISTORISCHER RUECKBLICK" ZKG INTERNATIONAL, BAUVERLAG, WIESBADEN, DE, vol. 46, no. 3, 1 March 1993 (1993-03-01), pages 123-128, XP000364117 ISSN: 0722-4397 * the whole document * -----	1-8	
Y	US 4 736 894 A (FERRADA ET AL) 12 April 1988 (1988-04-12) * the whole document * -----	1-8	TECHNICAL FIELDS SEARCHED (IPC)
Y	GB 807 711 A (F. L. SMIDTH & CO. A/S) 21 January 1959 (1959-01-21) * the whole document * -----	1-8	B02C
Y	US 3 580 520 A (THOMAS LEROY MYERS) 25 May 1971 (1971-05-25) * the whole document * -----	9-11	
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		17 October 2005	Kopacz, I
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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EPO FORM 1503 03.82 (P04C01)

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims 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 the first ten claims.

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:

1-11



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LACK OF UNITY OF INVENTION
SHEET B

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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: 1-11

Mill with lining providing helical rib

2. claims: 12-14

Lining providing a joining means

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

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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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17-10-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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US 4736894	A	12-04-1988	NONE	
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