Abstract: The invention is an apparatus for separating particles of solid material content of slurry, the apparatus comprising slurry introducing means (10) arranged at an inlet of a first conveying channel (12) and adapted for introducing the slurry into the first conveying channel (12), a conveyor belt (16) adapted for conveying the slurry in the first conveying channel (12) and provided with a plurality of scraper elements (18) adapted for disintegration of the solid material content of slurry, liquid introducing means (14) adapted for introducing liquid to be mixed to the slurry, at least one ultrasonic emitting device (20) arranged in an ultrasonic vessel (22) filled with liquid, the ultrasonic vessel (22) partly encompasses the first conveying channel (12), and the at least one ultrasonic emitting device (20) is adapted for stimulating particle disintegration of the solid material content of the slurry, separator means (26) having an internal space (27) for accommodating the slurry and adapted for separating particles of solid material content of slurry into at least two particle groups based on the direction of a resultant force exerted on the particles, and a second conveying channel (24) arranged between the first conveying channel (12) and the ultrasonic vessel (22). In the apparatus the second conveying channel (24) is encompassed by the ultrasonic vessel (22), having an inclined bottom part (25) and connected with its inlet to the outlet of the first conveying channel (12), the liquid introducing means (14)

Title: APPARATUS AND METHOD FOR SEPARATING OF SOLID MATERIAL CONTENT OF SLURRY
Declarations under Rule 4.17:
— as to applicant’s entitlement to apply for and be granted a patent (Rule 4.17(H))
— of inventorship (Rule 4.17(iv))

Published:
— with international search report (Art. 21(3))

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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are arranged at the inlet of the second conveying channel (24), and the separator means (26) are connected to the outlet of the second conveying channel (24). The invention is furthermore a method for separating particles of solid material content of slurry based on particle size.
INTERNATIONAL SEARCH REPORT

International application No
PCT/HU2013/000069

A. CLASSIFICATION OF SUBJECT MATTER
INV. B03B1/00 B03B5/62 B03B11/00
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B03B B02C B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>A</td>
<td>DE 616 776 C (CLEAN COAL COMPANY LTD) 5 August 1935 (1935-08-05) page 3, line 14 - page 4, line 10; figure 1</td>
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Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

6 December 2013

Date of mailing of the international search report

20/12/2013

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Leitner, Josef

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