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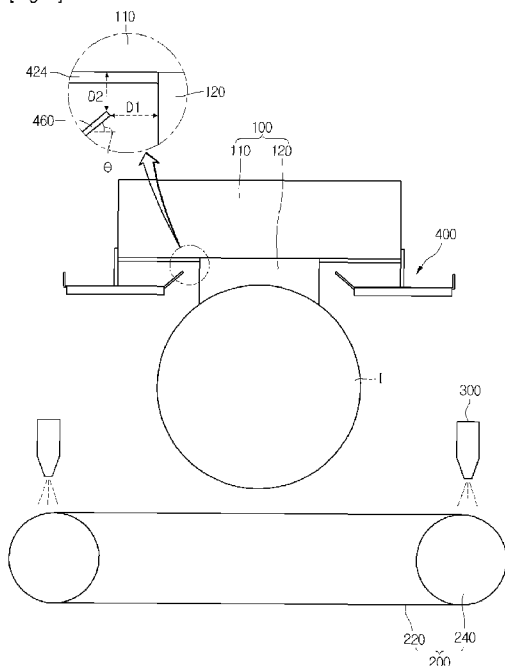
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(54) Title: APPARATUS FOR SLICING INGOT

[Fig. 1]



(57) Abstract: Provided is an apparatus for slicing an ingot. The apparatus for slicing the ingot includes a mounting part on which the ingot is mounted, a wire saw disposed under the mounting part, a slurry supply part supplying slurry from an upper side of the wire saw, and a slurry blocking part disposed on the mounting part. The slurry blocking part includes a fixing part coupled to one side of the mounting part and a slurry collection part to which a central portion thereof is coupled to a lower portion of the fixing part.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2012/001384**A. CLASSIFICATION OF SUBJECT MATTER****B28D 5/04(2006.01)i, B28D 7/04(2006.01)i**

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)

B28D 5/04; B08B 1/00; B24B 27/06

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords:wire, cutting, ingot, slurry

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2009-535224 A (Corning Incorporated) 01 October 2009 See claim 1, figure 1	1-20
A	JP 11-277395 A (SHIN ETSU HANDOTAI CO LTD) 12 October 1999 See claim 1, figure 4	1-20
A	JP 2002-283208 A (DENSO CORP) 03 October 2002 See claim 1, figure 1, 2	1-20
A	JP 2004-322299 A (KANAI HIROAKI) 18 November 2004 See claim 1, figure 1, 2	1-20

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2009-535224 A	01.10.2009	CN 101432091 A EP 2012959 A1 JP 2009-535224 T KR 10-2009-0005404 A KR20090005404A TW 200808475 A US 2007-0251516 A1 WO 2007-127357 A1	13.05.2009 14.01.2009 01.10.2009 13.01.2009 13.01.2009 16.02.2008 01.11.2007 08.11.2007
JP 11-277395 A	12.10.1999	JP 3695124 B2	14.09.2005
JP 2002-283208 A	03.10.2002	JP 3885508 B2	21.02.2007
JP 2004-322299 A	18.11.2004	None	