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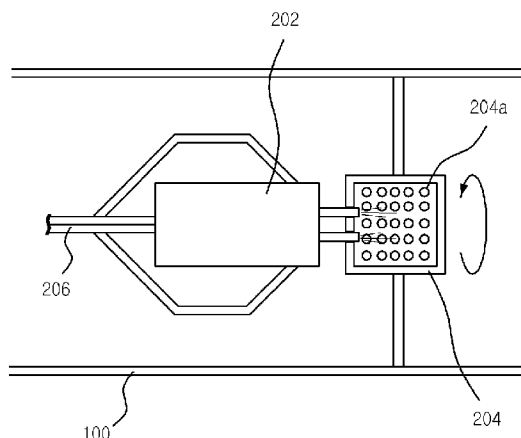
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(54) Title: APPARATUS AND METHOD FOR REHABILITATING SUPERANNATED PIPE

[Fig. 2]



(57) Abstract: The present invention relates to rehabilitating apparatus and method of superannuated pipe for removing coal-tar enamel coated inner surface on the middle or large pipe and scale layer growing on the inner surface of water pipe by the rust and then continuously carry out the polishing and painting processes using single cleaning pipe robot. Rehabilitating apparatus and method of superannuated pipe comprising: a main body having plural segmentation pipes and first moving element; a joints for changing of direction connect the plural segmentation pipes to bend the segmentation pipes corresponding with curvature of the superannuated bending pipe; a rotation means being connected to the center of end one out of the joints for changing of direction; a scale removing means expanding to radius direction of the rotation means, which minutely draw cut lines while the rotation to circumference direction of the superannuated pipe so that exfoliate the scale on the inner surface of the pipe; and polishing means for carrying out post-processes after removing the scale layer.



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A. CLASSIFICATION OF SUBJECT MATTER***B08B 9/02(2006.01)i, B08B 9/032(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)

IPC : B08B

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 since 1975

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

eKIPASS (KIPO internal) & keywords : pipe, scale, remove, direction, joint

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 06-134422 A (MITSUBISHI HEAVY IND LTD) 17 May 1994 See abstract and Fig.1	1-25
A	JP 2005-230676 A (ATSUJI TEKKO KK) 2 Sep. 2005 See claims 1-5 and Fig.8	1-25
A	JP 05-057261 A (KURATA SAKUJI) 9 March 1993 See abstract and Fig.2	1-25

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

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 06-134422 A	17.05.1994	None	
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JP 05-057261 A	09.03.1993	None	

INTERNATIONAL SEARCH REPORT

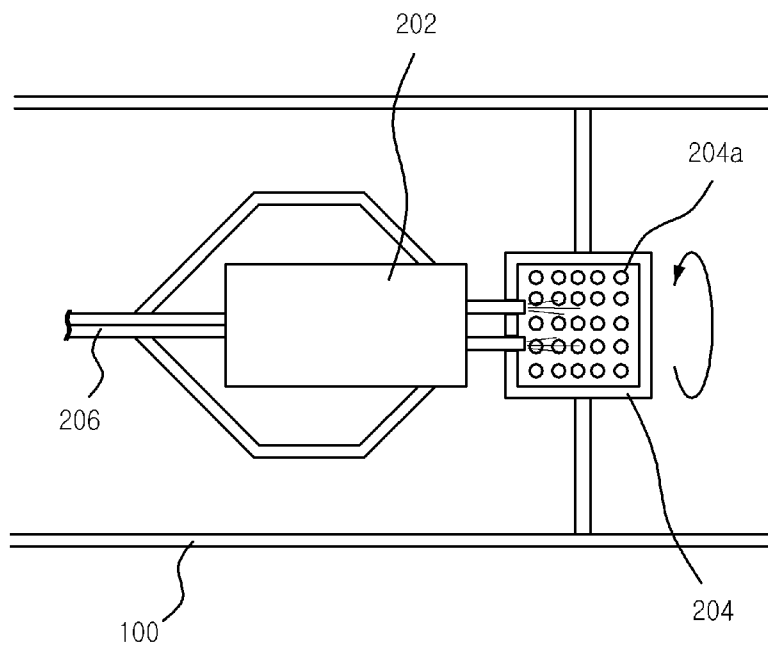
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JP 2005-230676 A	02.09.2005	None	
JP 05-057261 A	09.03.1993	None	

[Fig. 2]



[Fig. 3]

