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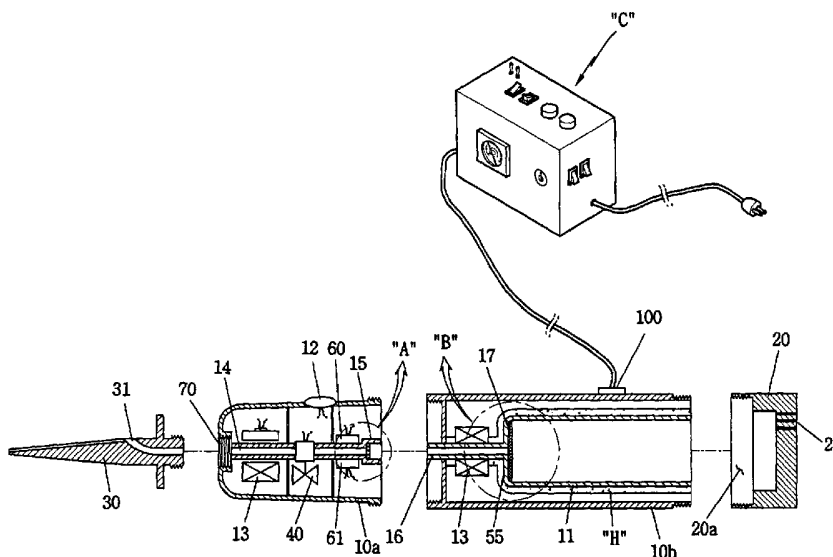
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(54) Title: ELECTRIC WAX CHISEL





(57) Abstract: Disclosed is an electric wax chisel. A main body having a shape of hollow cylinder includes a tank provided inside the hollow cylinder. The tank contains wax. A chisel tip having a hole is installed at one end of the main body. A heating member is disposed in the outer face of the tank. A control box is electrically connected with the main body by an electric wire. The main body comprises a first chamber and a second chamber. The first chamber has an exit hole at one end, in which the chisel tip is mounted, and an inlet hole at the other end. The second chamber has a discharging hole correspond to the inlet hole, and a tank to contain a wax. A terminal for supplying an electric power is disposed in the second chamber. A cap for sealing the second chamber is provided. The cap has a space depressed inwardly along the tube axis. Therefore, the electric wax chisel is improved so as to use easily and conveniently.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC7 A61C 13/20 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) IPC7 A61C 13/00, B22C 7/02		
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 practicable, search terms used) PAJ, E-KIPASS		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 09-164152 A (UEINA SOGO KENKYUSHO:KK) 24 JUNE 1997 See the whole document	1-20
A	JP 2001-37782 A (ISHIZUKA:KK) 13 FEBRUARY 2001 See the whole document	1-20
A	JP 2000-350738 A (ISHIZUKA:KK) 19 DECEMBER 2000 See figures 1-2	1-20
A	JP 07-236646 A (G C:KK) 12 SEPTEMBER 1995 See claim 1 and figure 1	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 09-164152 A	24.06.97	NONE	
JP 2001-37782 A	13.02.01	NONE	
JP 2000-350738 A	19.12.00	NONE	
JP 07-236646 A	12.09.95	NONE	