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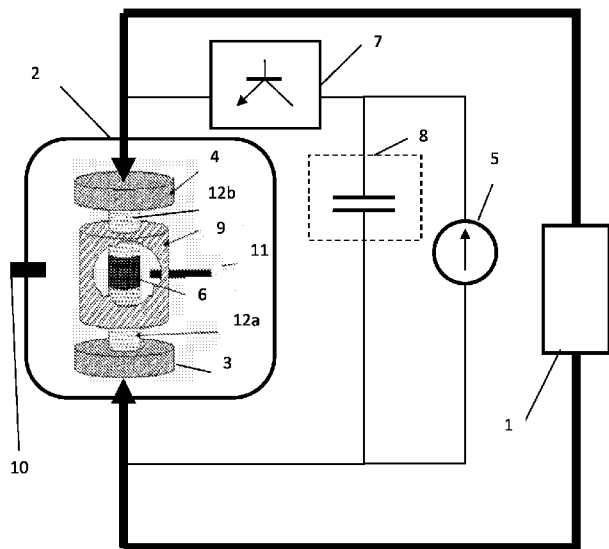


Fig. 3

(57) Abstract: The object of the invention is a device intended for powder materials consolidation, provided with an operating chamber, press connected to high-current discharge electrodes top and bottom, with arranged therebetween the sintered powder subjected to the pressure exerted by the press. To the top and bottom electrode there is connected a capacitive circuit with a power supply unit, closed by a high-current switch being a transistor switch. The object of the invention is also a method of powder materials consolidation in the device according to the invention, wherein the powder material is subjected to simultaneous operation of pressure in the range of 1-200 MPa and consolidation by electric current pulses with intensity of 1-80 kA, repeated with frequency from the range of 0.1 Hz to 100 Hz, generated by opening and closing the transistor switch.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. B22F3/105 ADD.		
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B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) B22F H05B B29C		
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	----- WO 2010/070623 A2 (EPOS S R L [IT]; FAIS ALESSANDRO [IT]) 24 June 2010 (2010-06-24) cited in the application the whole document -----	1-19
<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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Information on patent family members

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