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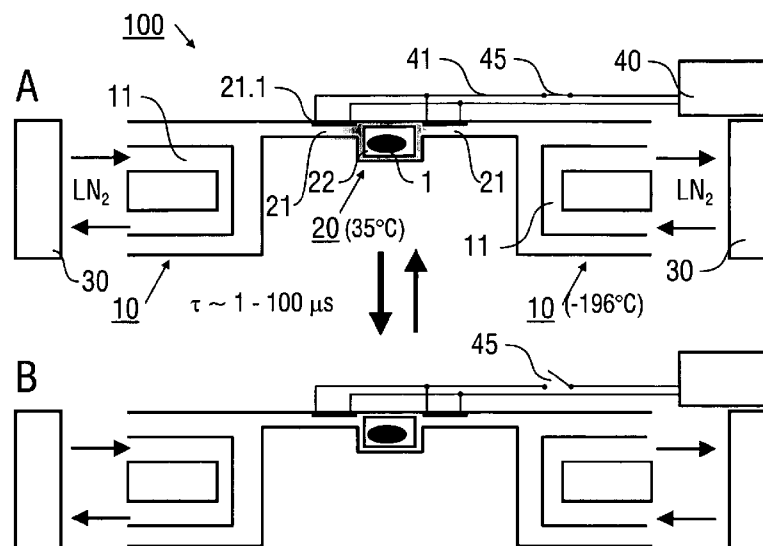


FIG. 1

(57) Abstract: An ultra-rapid freezing device (100) adapted for cooling a sample (1), comprises a substrate chip (10) being adapted for cooling the sample (1), and at least one sample carrier (20) being adapted for accommodating the sample (1) and comprising at least one heatable support (21), through which the at least one sample carrier (20) is attached to the substrate chip (10). Preferably, the at least one sample carrier (20) is attached to the substrate chip (10) in a suspended manner. Furthermore, a method of ultra-rapid freezing a sample (1) is described. The at least one sample carrier (20) can be switched between a heated state at which a thermal gradient is formed relative to the substrate chip (10) and a cooled state at which a thermal equilibrium is formed relative to the substrate chip (10).



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

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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)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 300 130 B1 (TONER MEHMET [US] ET AL) 9 October 2001 (2001-10-09) cited in the application column 2, line 64 - column 3, line 29 column 11 - column 12; claims 1-26 column 5 - column 11; examples column 11 - column 12; claims -----	1-37
X	EP 1 028 623 A1 (ACTON ELIZABETH [GB]; MORRIS GEORGE JOHN [GB]) 23 August 2000 (2000-08-23)	1-19
Y	paragraph [0036] - paragraph [0043] figure 5 column 9 - column 10; claims ----- -/--	20-37



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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	figures 5-8 column 20; claims -----	20-37
X	EP 0 373 738 A2 (UNIV TEXAS [US]) 20 June 1990 (1990-06-20)	1-19
Y	figures 1-14 columns 22-26; claims -----	20-37
A	WO 2006/037760 A1 (FRAUNHOFER GES FORSCHUNG [DE]; FUHR GUENTER [DE]; ZIMMERMANN HEIKO [DE]) 13 April 2006 (2006-04-13) pages 32, 33; figures 3,4 page 5, line 10 - page 6, line 5 pages 22-27; claims -----	1-37

INTERNATIONAL SEARCH REPORT

Information on patent family members

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