

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2018/073646

A. CLASSIFICATION OF SUBJECT MATTER

G21C 15/00 (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)

G21B 1/00; G21C 15/00; G21C 17/00

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)

CNABS, CNTXT: 回路, 氦气, 聚变; VEN: loop, Helium, fusion

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 105118536 A (CHINESE PEOPLE'S LIBERATION ARMY ARMY ARTILLERY AIR DEFENSE ACADEMY) 02 December 2015 (02.12.2015), claims 1-7, and figure 1	1-6
PX	CN 106935284 A (SOUTHWESTERN INSTITUTE OF PHYSICS) 07 July 2017 (07.07.2017), claims 1-22	1-6
PX	CN 107067918 A (SOUTHWEST PETROLEUM UNIVERSITY) 18 August 2017 (18.08.2017), claims 1-6	1-6
PX	CN 107221356 A (HEFEI INSTITUTES OF PHYSICAL SCIENCE, CHINESE ACADEMY OF SCIENCES) 29 September 2017 (29.09.2017), claims 1-4	1-6
A	US 3993540 A (ATOMIC ENERGY AUTHORITY UK) 23 November 1976 (23.11.1976), entire document	1-6

Further documents are listed in the continuation of Box C.

See patent family annex.

<p>* Special categories of cited documents:</p> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>“&” document member of the same patent family</p>
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Date of the actual completion of the international search
20 April 2018

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25 April 2018

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004105522 A1 (KRIE-I KRIEL W A O et al.) 03 June 2004 (03.06.2004), entire document	1-6
A	CN 102358618 A (CHINA ACADEMY OF ENGINEERING PHYSICS INSTITUTE OF NUCLEAR PHYSICS AND CHEMISTRY) 22 February 2012 (22.02.2012), entire document	1-6
A	US 3386884 A (COMMISSARIAT ENERGIE ATOMIQUE) 04 June 1968 (04.06.1968), entire document	1-6

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2018/073646

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 105118536 A	02 December 2015	CN 105118536 B	31 May 2017
CN 106935284 A	07 July 2017	None	
CN 107067918 A	18 August 2017	None	
CN 107221356 A	29 September 2017	None	
US 3993540 A	23 November 1976	CH 580856 A5	15 October 1976
		DE 2503137 A1	07 August 1975
		DE 2503137 C2	27 October 1983
		JP S589398 B2	21 February 1983
		JP S50108495 A	26 August 1975
		GB 1470795 A	21 April 1977
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		AT 326055 T	15 June 2006
		EP 1374251 A1	02 January 2004
		JP 2004526157 A	26 August 2004
		WO 02078009 A1	03 October 2002
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		DE 60211320 D1	14 June 2006
		CN 1502112 A	02 June 2004
		CN 1225743 C	02 November 2005
		KR 100856962 B1	04 September 2008
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		WO 02078009 B1	09 January 2003
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US 3386884 A	04 June 1968	BE 683915 A	16 December 1966
		LU 51622 A1	22 September 1966
		SE 308626 B	17 February 1969
		ES 329433 A1	16 October 1967
		NL 6610281 A	25 January 1967

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Information on patent family members

International application No.
PCT/CN2018/073646

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
		LU 51622 A	22 September 1966
		GB 1115709 A	29 May 1968
		CH 460385 A	31 July 1968
		FR 1454440 A	11 February 1966
		IL 26131 A	25 June 1969