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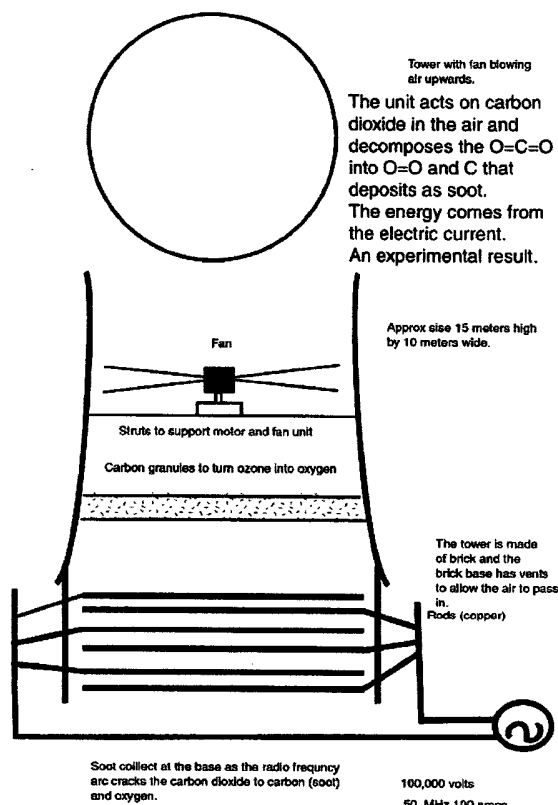
(51) INT CL:
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(56) Documents Cited:
EP 1752419 A **JP 100005323 A**
JP 060333404 A **JP 050225807 A**
RU 002139901 C **US 20040253167 A**
Abstract GTP.092

(58) Field of Search:
UK CL (Edition X) C1A
INT CL A61L, B01D, B01J, C01B
Other: WPI EPODOC STN GOOGLE

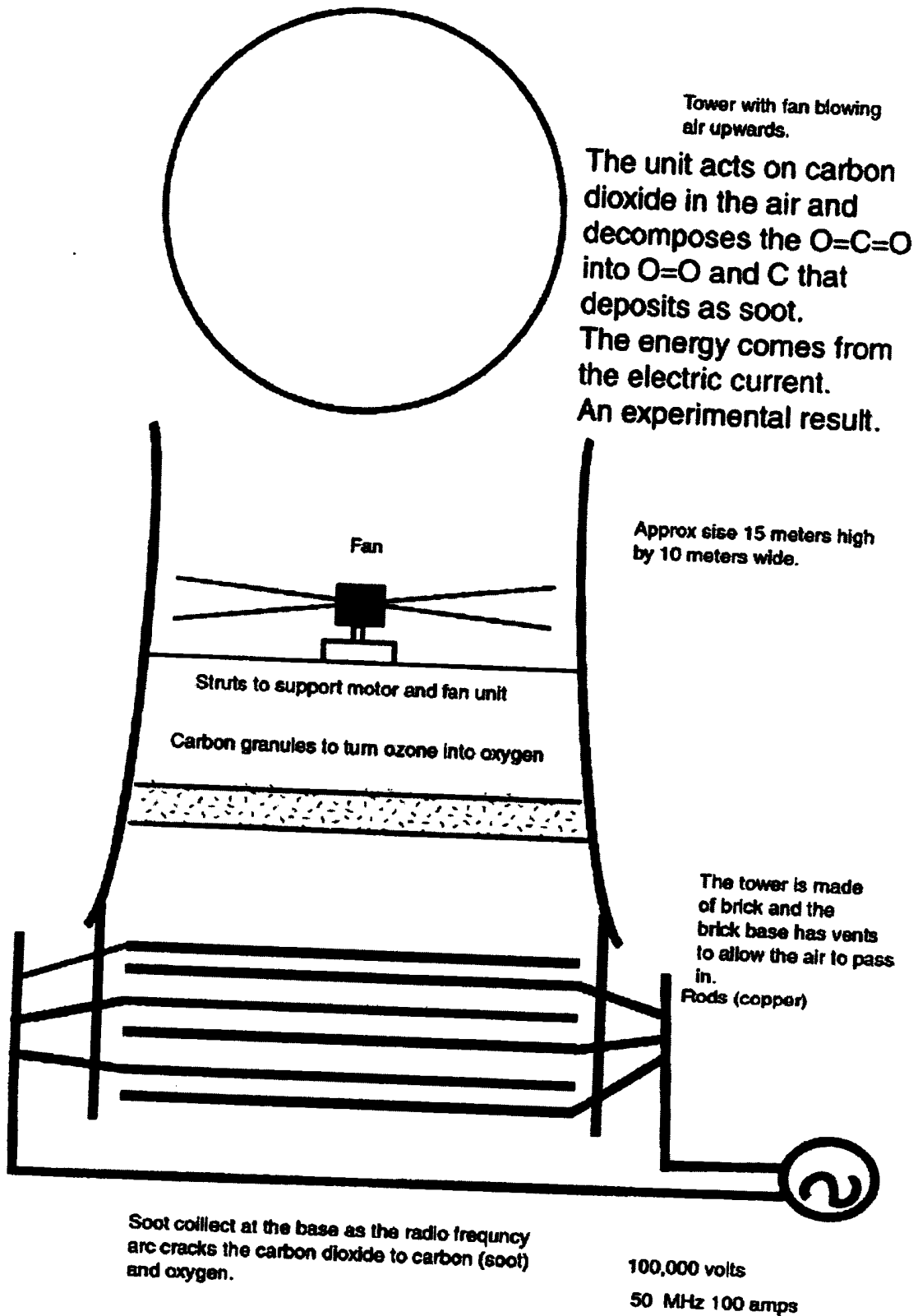
(54) Abstract Title: **A device for converting carbon dioxide into oxygen and carbon**

(57) A device comprising an array of copper electrodes for generating an RF field through which a stream of carbon dioxide can be passed, where the interaction between the RF field and the carbon dioxide results in the formation of solid carbon and oxygen.



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Diagram



Description:

An array of copper rods excited by high voltage radio frequency current, this is placed at the bottom of a tower vented at the bottom with an extractor fan pulling the air through the array of rods.

The radio frequency excitation forms a radio frequency arc between the rods where the reaction takes place.

The exact values of the high voltage and frequency must be found by experiment but my guess is a potential of 100,000 volt, 50 megahertz.

The power can come from a proton fusion (Stellerator) running at that frequency.

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Claim

The device splits the carbon dioxide molecule to carbon and oxygen.

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Application No: GB0711529.8

Claims searched: 1

Examiner: Nicholas Mole

Date of search: 21 August 2007

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1	Abstract GTP.092 < http://flux.aps.org/meetings/YR02/GEC02/baps/abs/S90.html >
X	1	US 2004/0253167 A (SILVA) see esp. paragraphs 80 and 81
X	1	RU 2139901 C (KIRILLOV) see WPI abstract no. 2000-474043
X	1	JP 05225807 A (YOSHIDA) see WPI abstract no. 1993-314765
X	1	JP 06333404 A (YOSHIDA) see WPI abstract no. 1995-055152
X	1	JP 10005323 A (YOSHIDA) see WPI abstract no. 1998-124092
X	1	EP 1752419 A (TOYO) see para 18

Categories:

X Document indicating lack of novelty or inventive step	A Document indicating technological background and/or state of the art.
Y Document indicating lack of inventive step if combined with one or more other documents of same category.	P Document published on or after the declared priority date but before the filing date of this invention.
& Member of the same patent family	E Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X:

C1A

Worldwide search of patent documents classified in the following areas of the IPC

A61L; B01D; B01J; C01B

The following online and other databases have been used in the preparation of this search report

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WPI EPO DOC STN GOOGLE

International Classification:

Subclass	Subgroup	Valid From
C01B	0013/02	01/01/2006
B01D	0053/62	01/01/2006
C01B	0031/02	01/01/2006