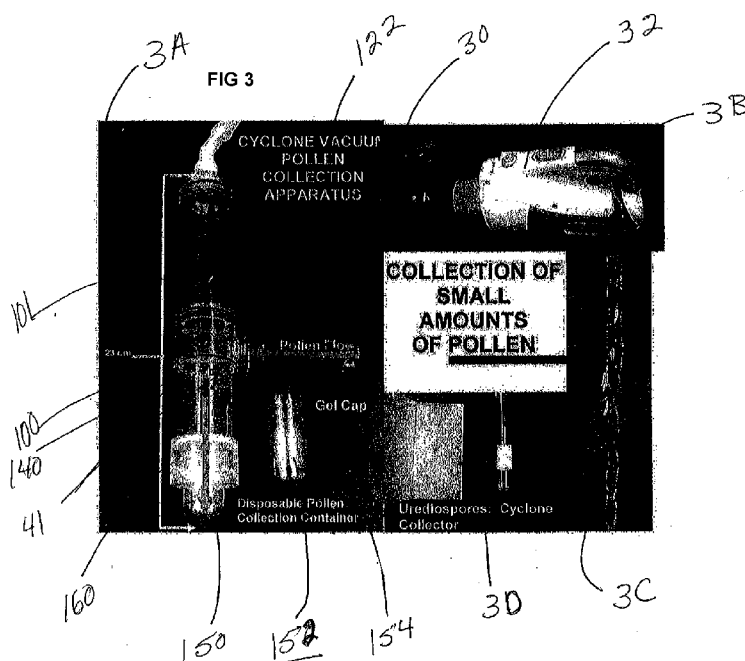




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[Continued on next page]

(54) Title: VACUUM COLLECTION OF POLLEN AND ANTHERS FROM HAPLOID AND DOUBLED HAPLOID PLANTS



(57) Abstract: A method for collecting increased amounts of viable pollen from the anthers of a corn plant is disclosed. A cyclonic chamber having a vacuum port, a pollen collection port, and a pollen deposition port is connected to a source of a vacuum at the vacuum collection port. The vacuum created a vacuum at the pollen collection port which is passed adjacent the anthers of the plant to draw into the cyclonic chamber pollen from the anthers that would not be shed naturally by the anthers. The collected pollen is deposited in a reservoir connected to the deposition port of the cyclonic device where it is viable for the pollination of the same or another plant.

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A01H 1/02 (2012.01)

USPC - 800/275

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)

IPC(8) - A01H 1/02, 1/08, 3/00, 4/00 (2012.01)

USPC - 471.41, 1.5, 58.1R; 800/275

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)

PatBase, Google Patents, Google, Proquest

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,141,904 A (GREAVES et al) 07 November 2000 (07.11.2000) entire document	1-16
Y	US 7,135,615 B2 (KATO) 14 November 2006 (14.11.2006) entire document	1-16
Y	US 4,922,651 A (ATKINSON et al) 08 May 1990 (08.05.1990) entire document	1-16
Y	US 6,617,492 B1 (EUBANKS) 09 September 2003 (09.09.2003) entire document	10
Y	US 2010/0017908 A1 (ZHAO et al) 21 January 2010 (21.01.2010) entire document	13-16

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"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

Date of the actual completion of the international search

25 May 2012

Date of mailing of the international search report

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