(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/006846 A3

(51) International Patent Classification[7]: A01H 5/00, C12N 15/82

(21) International Application Number: PCT/US2004/022578

(22) International Filing Date: 13 July 2004 (13.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/487,380 14 July 2003 (14.07.2003) US

(71) Applicant *(for all designated States except US)*: **AGRINOMICS LLC** [US/US]; 16160 S.W. Upper Boones Ferry Road, Portland, Oregon 97224-7744 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **LIGHTNER, Jonathan** [US/US]; 28750 S. Heisinger Lane, Mulino, Oregon 97042 (US). **NG, Hein, Tsoeng** [CN/US]; 12975 SW 19th Street, Beaverton, Oregon 97008 (US).

(74) Agents: **SALE, Terri, L.** et al.; Exelixis, Inc., P.O. Box 511, 170 Harbor Way, South San Francisco, California 94083-0511 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
24 March 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GENERATION OF PLANTS WITH ALTERED OIL CONTENT

(57) Abstract: The present invention is directed to plants that display an altered oil content phenotype due to altered expression of a HIO110.3 nucleic acid. The invention is further directed to methods of generating plants with an altered oil content phenotype.

WO 2005/006846 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/22578

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01H 5/00; C12N15/82

US CL : 800/281, 298

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)

U.S. : 800/281, 298

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)

Sequence Databases, WEST, Dialog

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Database GenEmbl, Accession AC012463, CHAO ET AL, 15 August 2000.	1-11
A	Sequence Database GenEmbl, Accession AY084249, HAAS ET ALl, 27 March 2003.	1-11

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"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)

"O" document referring to an oral disclosure, use, exhibition or other means

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

"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

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search

04 November 2004 (04.11.2004)

Date of mailing of the international search report

25 JAN 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Elizabeth F. McElwain

Telephone No. (571) 272-1600

Form PCT/ISA/210 (second sheet) (January 2004)