

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 June 2008 (05.06.2008)

PCT

(10) International Publication Number
WO 2008/065181 A3

(51) International Patent Classification:

C07D 309/04 (2006.01) A61K 8/49 (2006.01)
C07D 309/10 (2006.01) A23L 1/226 (2006.01)
C07D 309/18 (2006.01) A61Q 13/00 (2006.01)

(21) International Application Number:

PCT/EP2007/063051

(22) International Filing Date:

30 November 2007 (30.11.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

06291857.8 1 December 2006 (01.12.2006) EP
60/861,966 1 December 2006 (01.12.2006) US

(71) Applicant (for all designated States except US): V. MANE
FILS [FR/FR]; 620, route de Grasse, F-06620 Bar sur Loup
(FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PLESSIS, Caroline
[FR/FR]; c/o V MANE FILS, 620, route de Grasse,
F-06620 Bar sur Loup (FR). MANE, Jean [FR/FR];
Domaine Saint Mathieu, F-06130 Grasse (FR).

(74) Agents: CABINET PLASSERAUD et al.; 52 rue de la
Victoire, F-75440 Paris Cedex 09 (FR).

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

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

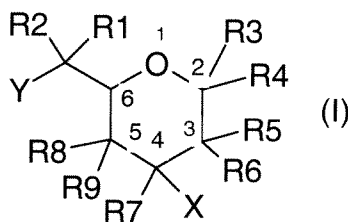
Published:

— 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 July 2008

(54) Title: PYRAN DERIVATIVES, PROCESS OF PREPARATION AND USE THEREOF IN PERFUMERY AND FLAVOUR-
ING



(57) Abstract: Pyran derivatives of general formula (I) wherein Y is a 5-, 6- or 7-mem-
bered ring, preferably a 5-membered ring, methyl or ethyl mono- or polysubstituted, and
optionally unsaturated, and R1, R2, R3, R4 are, each independently, a hydrogen atom or
a linear or branched C₁₋₅ alkyl or C₂₋₅ alkenyl group, and X is present or absent; when X
is present, R5, R6, R7, R8, R9 are all present, and X is a hydrogen atom or an OZ group,
wherein Z is a hydrogen atom or a R10 group or a C(O)R10 group; when X is absent, a
double bond involving the carbon atom at the 4 position is present and R7, R8 and R9 are
present, and one of R5 or R6 is present and the other one is absent, or R5, R6, and R7 are
present, and one of R8 or R9 is present and the other one is absent, or R7 is a =C (R11)

(R12) group and R5, R6, R8, R9 are present; and when they are present, each of R5-R12 group is, independently, a hydrogen atom or
a linear or branched C₁₋₅ alkyl or C₂₋₅ alkenyl group; and use of at least one pyran derivative of formula (I) as flavouring or fragrant
agent.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2007/063051

A. CLASSIFICATION OF SUBJECT MATTER

INV. **C07D309/04 C07D309/10 C07D309/18 A61K8/49 A23L1/226**
A61Q13/00

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)

C07D A23L A61K

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)

EP0-Internal , BEILSTEIN Data, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ¹	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE CAPLUS CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; XP002430734 retrieved from STN Database accession no. 1977:535063 RN 63387-23-5 abstract -& JP 52 007911 A (OTSUKA PHARMACEUTICAL CO LTD) 21 January 1977 (1977-01-21) -& DATABASE WPI Week 197709 Derwent Publications Ltd., London, GB; AN 1977-15605y XP002430741 abstract ----- -/--	1, 12



Further documents are listed in the continuation of Box C.



See patent family annex

* Special categories of cited documents -

¹A' document defining the general state of the art which is not considered to be of particular relevance

'E' earlier document but 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

28 April 2008

Date of mailing of the international search report

20/05/2008

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx 31 651 epo nl.
Fax: (+31-70) 340-3016

Authorized officer

Van Amsterdam, Leen

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2007/063051

(^Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	EP 0 189 144 A (KAO CORP) 30 July 1986 (1986-07-30) the whole document -----	1, 4, 6, 8, 11, 12, 15
A	EP 0 746 552 B1 (GIVAUDAN SA) 11 December 1996 (1996-12-11) page 15, table 2; examples 37-40, 43; claims -----	1-3, 11, 12, 15
A	US 4 963 285 A (M. A. SPRECKER ET AL) 16 October 1990 (1990-10-16) cited in the application column 15, line 32 - column 17, line 57; examples -----	1, 6-9, 11, 12, 14, 15
A	FR 1 013 862 A (SOCIÉTÉ DES USINES CHIMIQUES RHONE-POULENC) 5 August 1952 (1952-08-05) example 6 -----	1, 2
A	K. MIKAMI ET AL: J. CHEM. SOC., CHEM. COMM., no. 24, 1993, pages 1843-1844, XP000944733 * page 1844, table I, entries 6, 8 * -----	1
A	E. MONTAUDON ET AL: J. HETEROCYCLIC CHEM., vol. 28, no. 2, 1991, pages 459-463, XP002472220 page 460, table 1, compound 1c -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2007/063051

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 52007911	A	21-01-1977	JP 1199016 C	05-04-1984
			JP 58017175 B	05-04-1983
EP 0189144	A	30-07-1986	DE 3662787 D1	18-05-1989
			JP 61178977 A	11-08-1986
			US 4717506 A	05-01-1988
EP 0746552	B1	12-06-2002	DE 69527045 D1	18-07-2002
			DE 69527045 T2	24-10-2002
			WO 9620185 A2	04-07-1996
			EP 0746552 A1	11-12-1996
			ES 2176353 T3	01-12-2002
			JP 11505511 T	21-05-1999
			US 5510326 A	23-04-1996
			US 5665696 A	09-09-1997
US 4963285	A	16-10-1990	CA 2007940 A1	09-08-1990
			DE 69019019 D1	08-06-1995
			DE 69019019 T2	05-10-1995
			EP 0383446 A2	22-08-1990
FR 1013862	A	05-08-1952	NONE	