

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 October 2006 (05.10.2006)

PCT

(10) International Publication Number
WO 2006/104387 A1

(51) International Patent Classification:

A23L 3/3526 (2006.01) C07D 309/40 (2006.01)
A23L 3/3544 (2006.01) A23L 1/272 (2006.01)
C12C 5/04 (2006.01) A23L 2/58 (2006.01)
C07D 207/32 (2006.01)

(74) Agent: VAN WESTENBRUGGE, Andries; Nederland-
sch Octrooibureau, Postbus 29720, NL-2502 LS Den Haag
(NL).

(21) International Application Number:

PCT/NL2006/050064

(22) International Filing Date: 28 March 2006 (28.03.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

PCT/NL2005/000229

29 March 2005 (29.03.2005) NL

(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, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, 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, IS, IT, LT, LU, LV, 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).

(71) Applicant (for all designated States except US):
HEINEKEN SUPPLY CHAIN B.V. [NL/NL]; Burge-
meester Smeetsweg 1, NL-2382 PH Zoeterwoude (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HUGHES, Paul,**
Shane [GB/NL]; Doornenburg 102, NL-2261 XE
Leidschendam (NL). **BLOKKER, Peter** [NL/NL];
Zuidwijkring 167, NL-1705 LR Heerhugowaard (NL).
BROUWER, Erik, Richard [NL/NL]; Marketentster
142, NL-2401 JT Alphen Aan Den Rijn (NL). **ALEWIJN,**
Martinus [NL/NL]; Haarweg 267, NL-6709 RV Wagenin-
gen (NL). **VAN DER ARK, Richard** [NL/NL]; Wim
Sonneveldplein 42, NL-2548 ZH Den Haag (NL).

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

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

(54) Title: BEVERAGES AND FOODSTUFFS RESISTANT TO LIGHT INDUCED FLAVOUR CHANGES, PROCESSES FOR
MAKING THE SAME, AND COMPOSITIONS FOR IMPARTING SUCH RESISTANCE

(57) Abstract: One aspect of the present invention is concerned with a composition containing: (A) at least 10 µg of particular
substituted pyrroles per kg of dry matter; and (B) at least 100 mg per kg of dry matter of a pyranone selected from the group consisting
of maltol, 2,3-dihydro-3,5-dihydroxy-6-methyl-4H-pyran-4-one and combinations thereof; which composition, when dissolved in
water at a dry solids content of 0.1 wt.%, exhibits: i. an absorption at 280 nm (A280) that exceeds 0.01, preferably exceeds 0.05; and
ii. an absorption ratio A280/560 of at least 100, preferably of at least 200. The present composition can advantageously be used as
an additive in beverages or foodstuffs to prevent or reduce light induced flavour changes. The invention also encompasses a process
for the manufacture of the aforementioned composition.

WO 2006/104387 A1