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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 July 2006 (27.07.2006)

PCT

(10) International Publication Number
WO 2006/076965 A1

(51) International Patent Classification:
C12N 15/52 (2006.01) *C07K 14/415* (2006.01)
C12N 9/88 (2006.01) *C12P 13/00* (2006.01)

(21) International Application Number:
PCT/EP2005/014080

(22) International Filing Date:
28 December 2005 (28.12.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
A 84/2005 20 January 2005 (20.01.2005) AT

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(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).

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 "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) **Title:** R-HYDROXYNITRILE LYASES HAVING IMPROVED SUBSTRATE ACCEPTANCE AND THE USE THEREOF

(57) **Abstract:** R-hydroxynitrile lyases having an improved substrate acceptance, increased activity and increased selectivity, in which there is replacement in the amino acid sequence of R-hydroxynitrile lyases from the *Rosaceae* family either a) of the amino acid residue which corresponds to position 360 of the mature PaHNL5 protein by another apolar amino acid or a neutral amino acid and/or b) of the amino acid residue which corresponds to position 225 of the mature PaHNL5 protein by another polar amino acid, it also being possible where appropriate for 1 to 20 further residues in the active center or in the hydrophobic channel leading to the active center to be replaced.

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