



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

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| <b>(51) International Patent Classification <sup>7</sup> :</b><br><b>C07C 69/95, 67/52, 69/00</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 00/68179</b><br><b>(43) International Publication Date:</b> 16 November 2000 (16.11.00)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>(21) International Application Number:</b> PCT/EP00/03691<br><b>(22) International Filing Date:</b> 25 April 2000 (25.04.00)<br><b>(30) Priority Data:</b><br>MI99A000994 7 May 1999 (07.05.99) IT<br><b>(71) Applicant (for all designated States except US):</b> SYNTECO S.P.A. [IT/IT]; Via Parco del Ticino, 10, I-27028 San Martino Siccomario (IT).<br><b>(72) Inventors; and</b><br><b>(75) Inventors/Applicants (for US only):</b> SINISTRI, Monica [IT/IT]; Via Parco del Ticino, 10, I-27028 San Martino Siccomario (IT). SINISTRI, Roberta [IT/IT]; Via Parco del Ticino, 10, I-27028 San Martino Siccomario (IT).<br><b>(74) Agents:</b> MINOJA, Fabrizio et al.; Bianchetti Bracco Minoja S.r.l., Via Rossini, 8, I-20122 Milan (IT). |           | <b>(81) Designated States:</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO-patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> A PROCESS FOR THE PURIFICATION OF DIACEREIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>(57) Abstract</b><br><br>A process for the preparation of diacerein in which diacerein is purified by crystallization of the crude product with a mixture of solvents consisting of acetic acid and acetic anhydride, or with only acetic anhydride, followed by treatment of the solution with ethylenediaminetetraacetic acid to remove any chromium traces.                                                                                                                                                                                                                                                                                                                                                                                     |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |