

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 July 2002 (11.07.2002)

PCT

(10) International Publication Number
WO 02/052919 A3

(51) International Patent Classification⁷: **C30B 7/00**

(21) International Application Number: PCT/US01/50556

(22) International Filing Date:
21 December 2001 (21.12.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/752,857 28 December 2000 (28.12.2000) US

(71) Applicants (for all designated States except US): **S.S.C.I., INC.** [US/US]; 3065 Kent Avenue, West Lafayette, IN 47906 (US). **PURDUE RESEARCH FOUNDATION** [US/US]; 1291 Cumberland Avenue, West Lafayette, IN 47906 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **STAHLY, Patrick, G.** [US/US]; 3908 Sunnycroft Pl., West Lafayette, IN 47906 (US). **MORIS, Kenneth, R.** [US/US]; 700 Hillcrest, West Lafayette, IN 47906 (US). **STAHLI, Barbara, C.** [US/US]; 3908 Sunnycroft Pl., West Lafayette, IN 47906 (US). **COATES, David** [US/US]; 2435 Neil Armstrong Dr. Apt. 24, West Lafayette, IN 47906 (US).

(74) Agents: **RICHARDS, John** et al.; Ladas & Parry, 26 West 61st Street, New York, NY 10023 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent (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:
26 September 2002

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: METHODS OF SEARCHING FOR SOLID FORMS AND SCREENING A SAMPLE ACCORDING TO ITS FORMS

(57) Abstract: Methods for searching for possible forms of a sample and methods of screening a sample according to its form comprise disposing the sample in at least one receptacle that defines a capillary space, such as a capillary tube; The sample is solidified to generate at least one solid form or semisolid form, and the generated form is analyzed and classified. The analysis may determine differences in molecular arrangement of the various forms or characteristics that reflect the form. The methods may employ a plurality of samples, conditions, or receptacles in an effort to generate a variety of forms, so that all or a high percentage of possible forms are obtained.



WO 02/052919 A3