

(51) International Patent Classification:
B29C 35/08 (2006.01) *H05B 6/00* (2006.01)(74) Agent: **LEBER, Celia**; 2682 NW Shields Dr., Bend, OR 97701 (US).(21) International Application Number:
PCT/US2011/037391

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:
20 May 2011 (20.05.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/347,705 24 May 2010 (24.05.2010) US(71) Applicant (for all designated States except US): **XYLECO, INC.** [US/US]; 271 Salem St., Unit L, Woburn, MA 01801 (US).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MEDOFF, Marshall** [US/US]; 271 Salem St., Unit L, Woburn, MA 01801 (US).

[Continued on next page]

(54) Title: PROCESSING CHEMICALS

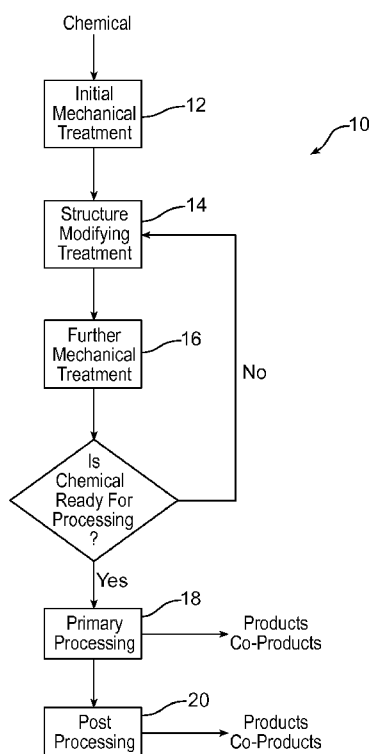


FIG. 1

(57) Abstract: Methods of processing chemicals change their structure, and in particular increase their solubility and/or rate of dissolution, for intermediates and products made from the structurally changed materials. Many of the methods provide materials that can be more readily utilized in reactions or other processes to produce useful intermediates and products, e.g., energy, fuels, foods or materials. Chemicals that are treated using the processes described herein can be used to form highly concentrated solutions. Treatment can change the functionality of the chemical, and thus the polarity of the chemical, which may render the treated chemical soluble in solvents in which the untreated chemical is insoluble or only sparingly or partially soluble. Methods may in some cases increase the solubility of the chemical in water or aqueous media. The chemical may be, for example, a solid, liquid, or gel, or mixtures thereof.



SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

— *as to the applicant's entitlement to claim the priority of
the earlier application (Rule 4.17(iii))*

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii))*

Published:

— *with international search report (Art. 21(3))*