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(71) Applicant (for all designated States except US): **GRT, INC.** [US/US]; 861 Ward Drive, Santa Barbara, CA 93111-2920 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GADEWAR, Sagar, B.** [IN/US]; 5510 Armitos Avenue, No. 27, Goleta, CA 93117 (US). **STOIMENOV, Peter, K.** [BG/US]; 442 Ellwood Beach Dr., #8, Goleta, CA 93117 (US). **GROSSO, Philip** [US/US]; 1201 Squirrel Creek Place, Auburn, CA 95602 (US). **MCFARLAND, Eric, W.** [US/US]; 820 Poinsettia Way, Santa Barbara, CA 93111 (US). **BREED, Ashley, W.** [ZA/US]; 759 Oakwalk, Apt. J, Goleta, CA 93117 (US). **WEISS, Michael, J.** [US/US]; 129 W. Los Olivos, Santa Barbara, CA 93105 (US). **WYRSTA,**

Michael, D. [US/US]; 720 North Alisos Street, Santa Barbara, CA 93103 (US).

(74) Agent: **CARPENTER, John, D.**; Christie, Parker & Hale, LLP, P.O. Box 7068, Pasadena, CA 91109-7068 (US).

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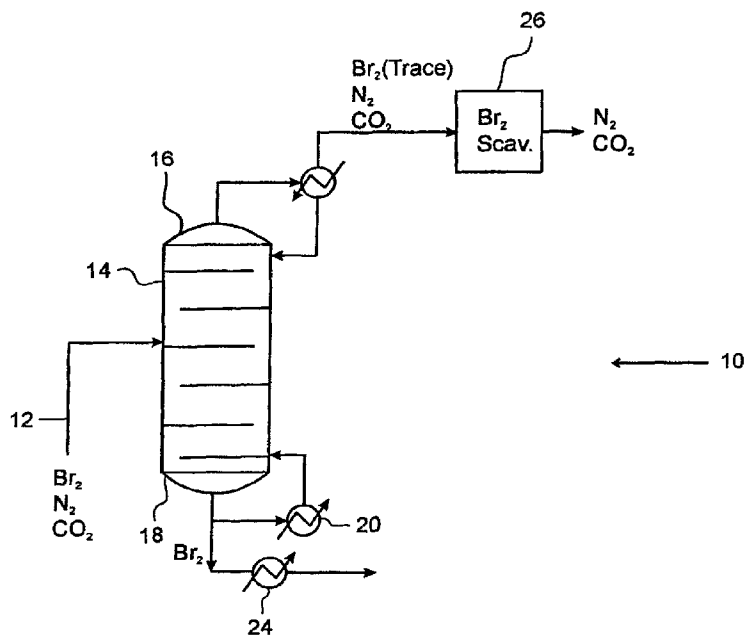
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(54) Title: SEPARATION OF LIGHT GASES FROM HALOGENS



(57) Abstract: A process is provided for separating one or more light gases from bromine or chlorine using one or more physical separations and contact with a chemical scrubber to recover additional halogen. In one aspect, the process comprises (a) providing a feed of halogen containing one or more light gases to a distillation column or flash vaporizer; (b) operating the distillation column or flash vaporizer to separate the feed into (i) a first liquid containing a major amount of halogen and no more than a minor amount of light gas(es), and (ii) a first vapor containing a major amount of light gas(es) and no more than a minor amount of halogen; and (c) providing the vapor to a chemical scrubber to recover halogen from the vapor.

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