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(71) Applicant (for all designated States except US): **LUMMUS TECHNOLOGY INC.** [US/US]; 1515 Broad Street, Bloomfield, NJ 07003-3096 (US).

(72) Inventor; and

(71) Applicant : **ROMEO, Joseph** [US/US]; 16 Dogwood Court, West Paterson, NJ 07424 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WILCOX, Richard, J.** [US/US]; 18 Memorial Road, West Caldwell, NJ 07006 (US). **RAM, Sanjeev** [US/US]; 17 Allen Ter-

race, Berkeley Heights, NJ 07922 (US). **GAMI, Ajay** [US/US]; 8 Vreeland Court, East Brunswick, NJ 08816 (US). **BRUMMER, Robert** [US/US]; 5 Evergreen Avenue, Wharton, NJ 07885 (US).

(74) Agents: **BERGMAN, Jeffrey, S.** et al.; Osha - Liang LLP, 909 Fannin Street, Suite 3500, Houston, TX 77010 (US).

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(54) Title: METHOD OF PROVIDING HEAT FOR CHEMICAL CONVERSION AND A PROCESS AND SYSTEM EMPLOYING THE METHOD FOR THE PRODUCTION OF OLEFIN

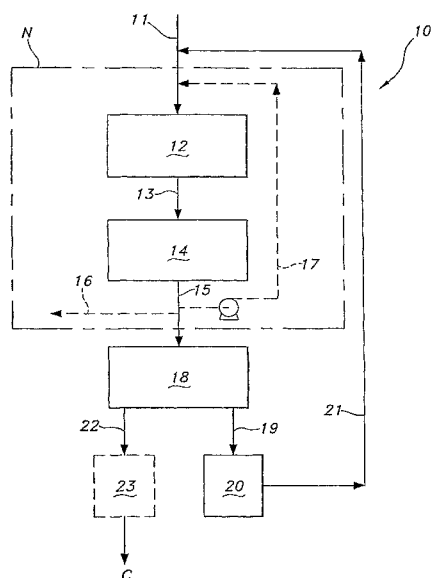


FIG. 1

(57) Abstract: A method and system for providing heat to a chemical conversion process is advantageously employed in the production of olefin by the catalytic dehydrogenation of a corresponding hydrocarbon. The catalytic dehydrogenation process employs diluent steam operating at a steam to oil ratio which can be 1.0 or below and relatively low steam superheater furnace temperature. The process and system are advantageously employed for the production of styrene by the catalytic dehydrogenation of ethylbenzene.



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