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(71) Applicant: **NOVOMER, INC.** [US/US]; 950 Danby Road, Suite 198, Ithaca, NY 14850 (US).

(72) Inventor: **MAHONEY, James, E.**; c/o Novomer, Inc., 950 Danby Road, Suite 198, Ithaca, NY 14850 (US).

(74) Agents: **LYON, Charles, E.** et al.; Choate, Hall & Stewart LLP, Two International Place, Boston, MA 02110 (US).

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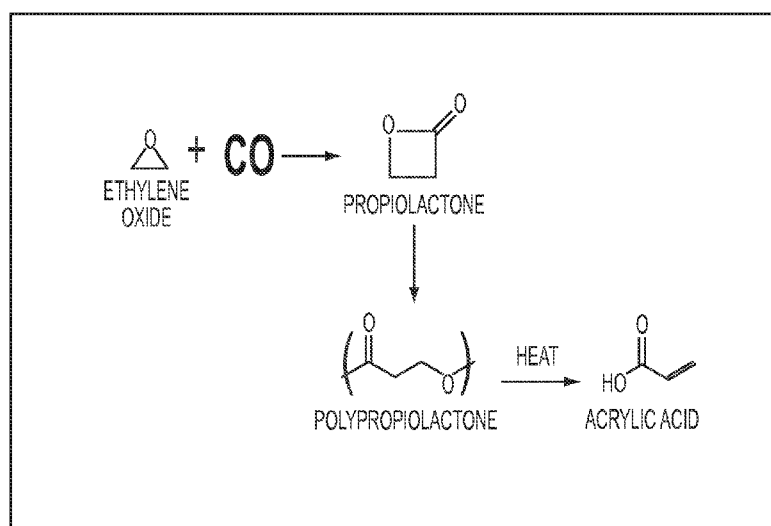


FIG. 1

(57) Abstract: In one aspect, the present invention encompasses safe and efficient methods for providing highly pure acrylic acid. In certain embodiments, the inventive methods include the step of producing polypropiolactone from ethylene oxide at a first location, transporting the polymer to a second location and pyrolyzing the polypropiolactone to provide glacial acrylic acid. In certain embodiments, the step of pyrolyzing the polymer is performed continuously in conjunction with a polymerization process to make SAPs.