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(71) Applicant: **EXXONMOBIL RESEARCH AND ENGINEERING COMPANY** [—/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors: **BROWN, Robert, C.**; 4608 Monongahela St., San Diego, CA 92117 (US). **COPPERSMITH, Jennifer**; 4753 Bancroft St., Unit 2, San Diego, CA 92116 (US). **PRAKASH, Prachee**; 10815 Vereda Sol Del Dios, San Diego, CA 92130 (US). **AKELLA, Srividya**; 11513 Creekstone Lane, San Diego, CA 92128 (US). **SESHADRI, Rekha**; 8387 Whelean Dr., San Diego, CA 92119 (US).

(74) Agent: **RAKERS, Leanne, M.**; Harness, Dickey & Pierce, P.l.c., 7700 Bonhomme Avenue, Suite 400, St. Louis, MO 63105 (US).

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(54) Title: CELL SYSTEMS AND METHODS FOR IMPROVING FATTY ACID SYNTHESIS BY EXPRESSION OF DEHYDROGENASES

(57) Abstract: The invention relates to methods for producing lipids such as fatty acid products in recombinant host cells engineered to express a non-native gene encoding a dehydrogenase. The recombinant microorganisms are able to proliferate at a higher rate as compared with microorganisms that do not express a non-native dehydrogenase gene, and cultures of microorganisms that are engineered for lipid production and that express a non-native dehydrogenase produce more lipid than cultures of control microorganisms that do not include a non-native dehydrogenase gene.

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