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(12) United States Patent
Copp et al.**(10) Patent No.: US 11,613,511 B2**
(45) Date of Patent: Mar. 28, 2023**(54) METHODS OF MAKING BEMPEDOIC ACID AND COMPOSITIONS OF THE SAME****(71) Applicant: Esperion Therapeutics, Inc., Ann Arbor, MI (US)****(72) Inventors: Richard Copp**, Pinckney, MI (US); **Mohamed Abdelnasser**, New City, NY (US); **Christopher M. Cimarusti**, Clementon, NJ (US); **Jonathan Lane**, Longmont, CO (US); **Michael Barkman**, Louisville, CO (US); **Rasidul Amin**, Cary, NC (US); **Arthur John Cooper**, Mentor, OH (US); **Damodaragounder Gopal**, Highland Heights, OH (US); **Philipp Selig**, Linz (AT)**(73) Assignee: Esperion Therapeutics, Inc., Ann Arbor, MI (US)****(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.**(21) Appl. No.: 17/742,728****(22) Filed: May 12, 2022****(65) Prior Publication Data**

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Related U.S. Application Data**(63)** Continuation of application No. 17/577,829, filed on Jan. 18, 2022, which is a continuation of application No. 17/150,321, filed on Jan. 15, 2021, now abandoned, which is a continuation of application No. PCT/US2020/038622, filed on Jun. 19, 2020.**(60)** Provisional application No. 62/864,873, filed on Jun. 21, 2019.**(51) Int. Cl.**
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See application file for complete search history.**(56) References Cited**

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(57) ABSTRACT

The invention provides methods of preparing 8-hydroxy-2, 2,14,14-tetramethylpentadecanedioic acid and methods of making a pharmaceutical material comprising a purified amount of 8-hydroxy-2,2,14,14-tetramethylpentadecanedioic acid. Also provided are compositions and pharmaceutical materials including a purified amount of 8-hydroxy-2, 2,14,14-tetramethylpentadecanedioic acid as well as methods of treating various diseases and conditions using the compositions and pharmaceutical materials.

17 Claims, 6 Drawing Sheets