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(12) United States Patent
Copp et al.**(10) Patent No.: US 11,760,714 B2****(45) Date of Patent: *Sep. 19, 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.

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CPC **C07C 51/04** (2013.01); **C07C 59/285** (2013.01); **C07B 2200/13** (2013.01)**(58) Field of Classification Search**
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Primary Examiner — Ana Z Muresan*(74) Attorney, Agent, or Firm* — Goodwin Procter LLP**(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.

20 Claims, 6 Drawing Sheets