US005281722A

United States Patent [19]

Blaschke et al.

[11] Patent Number: 5,281,722

[45] Date of Patent: Jan. 25, 1994

[54] PREPARATION AND USE OF SALTS OF THE PURE ENANTIOMERS OF ALPHA-LIPOIC ACID

[75] Inventors: **Gottfried Blaschke**, Münster; **Ursula Scheidemantel**, Münster/Hiltrup; **Horst Bethge**, Hanau-Wolfgang; **Roland Möller**, Hammersbach; **Thomas Beisswenger**, Bad Vilbel; **Klaus Huthmacher**, Gelnhausen, all of Fed. Rep. of Germany

[73] Assignee: **Degussa AG**, Fed. Rep. of Germany

[21] Appl. No.: **975,075**

[22] Filed: **Nov. 12, 1992**

[30] **Foreign Application Priority Data**

Nov. 16, 1991 [DE] Fed. Rep. of Germany 4137773

[51] **Int. Cl.**[5] **C07D 339/04**; C11C 3/00

[52] **U.S. Cl.** **549/39**; 554/102; 562/401; 564/304

[58] **Field of Search** 562/401, 512, 606; 549/39; 514/440; 564/304; 554/102

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,772,727 9/1988 Sutherland et al. 549/39
4,973,745 11/1990 Blasche et al. 562/401

OTHER PUBLICATIONS

Journal of the American Chemical Society; V. 79, Nr. 24; Dec. 20, 1957, pp. 6483–6487.

Chemical Abstracts; vol. 94, No. 13, Mar. 30, 1981; Abstract No. 103722g.

Chemical Abstracts; vol. 63, No. 13; Dec. 20, 1965; Abstract No. 17809b.

Primary Examiner—Paul F. Shaver
Assistant Examiner—Vera C. Clarke
Attorney, Agent, or Firm—Cushman, Darby & Cushman

[57] **ABSTRACT**

The pure enantiomers of alpha-lipoic acid are obtained by formation of the diastereomeric salt pairs with the optical antipodes of alpha-methylbenzylamine in solution.

10 Claims, No Drawings