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**United States Patent** [19][11] **Patent Number:** **5,578,576****Leddin**[45] **Date of Patent:** **Nov. 26, 1996**[54] **METHOD AND COMPOSITION FOR TREATING INTESTINAL WOUNDS OR ULCERS**[75] Inventor: **Desmond Leddin**, Nova Scotia, Canada[73] Assignee: **Dalhousie University**, Nova Scotia, Canada[21] Appl. No.: **300,428**[22] Filed: **Sep. 2, 1994**[51] Int. Cl.<sup>6</sup> ..... **A61K 38/16**; A61K 38/01; A61K 38/04; A61K 31/70[52] U.S. Cl. .... **514/21**; 514/2; 514/12; 514/23; 514/925; 514/926; 514/927; 424/439

[58] Field of Search ..... 514/2, 12, 21, 514/23, 925, 926, 927; 424/439

[56] **References Cited****U.S. PATENT DOCUMENTS**

4,414,238	11/1983	Schmidl	.....	426/602
4,847,296	7/1989	Babayan et al.	.....	514/552
5,214,066	5/1993	Szabo	.....	514/423
5,221,668	6/1993	Henningfield et al.	.....	514/23
5,223,284	6/1993	Kulczycki, Jr. et al.	.....	426/42
5,240,909	8/1993	Nitsche	.....	424/85.1

**FOREIGN PATENT DOCUMENTS**

1226817	9/1987	Canada	.
1227429	9/1987	Canada	.
1318592	6/1993	Canada	.
0292699	11/1988	European Pat. Off.	.
WO92/17189	10/1992	WIPO	.
WO93/19747	10/1993	WIPO	.

**OTHER PUBLICATIONS**Law et al. "The Effect of Dietary Protein Depletion on Immunocompetence" *Ann Surg.* 179(2) 168-173 1974.

Gitnick "Current Gastroenterology" pp. 32-49 1985.

Mulder, *Food and animal feed additives containing manganese—to promote growth of intestinal lactic acid bacteria, e.g. for prophylaxis of diabetes*, WPAT Abstracts, Abstract No. 93-203368/25.Serhan et al, *Use of lipoxin and its derivatives as antagonists for SRS-A especially LTD—for control of haemostasis, vasoconstriction, anaphylactic and allergic reactions in animals*, WPAT Abstracts, Abstract No. 90-361242/48.Brooks et al, *New subst. furan and pyrrole cpds.—are inhibitors of 5- and/or 12-lipoxygenase activity which orally prevent in vivo biosynthesis of leukotriene(s)*, WPAT Abstracts, Abstract No. 89-165598/22.Diamantstein et al, *Monoclonal antibodies recognizing human interleukin-2 receptors—useful in therapy of hyper-immune syndrome diseases, for coupling to cytotoxic agents and in diagnosis of the receptors in or on cells*, WPAT Abstracts, Abstract No. 87-286562/41.Johnson et al, *Extract of Tanacetium parthenium—containing sesqui:terpene lactone(s) for treating migraine and arthritic and bronchial disorders*, WPAT Abstracts, Abstract No. 84-011818/03.Ueda et al, *Drug for Protecting Gastrointestinal Cell*, JAPIO Abstracts, Abstract No. 85-013714.Zimmermann et al, *Insulin-like growth factor I and interleukin 1.beta messenger RNA in a rat model of granulomatous enterocolitis and hepatitis*, Chemical Abstracts, Abstract No. CA119-223219(21).

(List continued on next page.)

*Primary Examiner*—Mindy Fleisher*Assistant Examiner*—Nancy J. Degen*Attorney, Agent, or Firm*—Hill, Steadman & Simpson[57] **ABSTRACT**

The present invention provides a method for aiding healing or preventing the onset of intestinal wounds or ulcers in a patient. In addition, the present invention provides a method for reducing, or preventing, the gastrointestinal side effects associated with the administration of a nonsteroidal anti-inflammatory drug. Pursuant to the present invention, the composition includes a protein source, a carbohydrate source, a fat source, and a specialized vitamin and mineral profile.

**19 Claims, 12 Drawing Sheets**