US006492429B1

(12) **United States Patent**
**Graus et al.**

(10) **Patent No.: US 6,492,429 B1**
(45) **Date of Patent: Dec. 10, 2002**

(54) **COMPOSITION FOR THE TREATMENT OF OSTEOARTHRITIS**

(75) Inventors: **Ivo Maria Franciscus Graus**, Wg Ede (NL); **Hobbe Friso Smit**, As Utrecht (NL)

(73) Assignee: **N.V. Nutricia**, Zoetermeer (NL)

( * ) 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.: **09/662,123**

(22) Filed: **Sep. 14, 2000**

**Related U.S. Application Data**

(63) Continuation of application No. 09/613,562, filed on Jul. 10, 2000.

(51) **Int. Cl.**[7] ..... **A01N 35/00**; A01N 65/00
(52) **U.S. Cl.** ..... **514/688**; 424/725
(58) **Field of Search** ..... 424/195.1, 196.1, 424/523, 547; 514/54, 62, 365, 783, 688; 260/468, 294.8, 470

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,950,387 A * 4/1976 Joullie et al. ..... 260/468
4,315,028 A * 2/1982 Scheinberg ..... 424/290
5,120,538 A * 6/1992 Oei ..... 424/195.1
5,401,777 A 3/1995 Ammon et al.
5,494,668 A 2/1996 Patwardhan
5,629,351 A 5/1997 Taneja et al.
5,872,124 A * 2/1999 Koprowski et al. ..... 514/261
5,888,514 A * 3/1999 Weisman ..... 424/195.1

FOREIGN PATENT DOCUMENTS

WO 95 22323 8/1995
WO 97 07796 3/1997

OTHER PUBLICATIONS

Balch et al. Prescription for Nutritional Healing; Avery Publishing 2nd Ed. pp. 138–144, Oct. 1997.*
Lafeber et al., "Apocynin; a plant–derived, cartilage–saving drug, might be useful in the treatment of rheumatoid arthritis ", *Rheumatology*, (1999), pp. 1088–1093, vol. 38, British Society for Rheumatology.

* cited by examiner

*Primary Examiner*—Christopher R. Tate
*Assistant Examiner*—Patricia A Patten
(74) *Attorney, Agent, or Firm*—Browdy and Neimark, P.L.L.C.

(57) **ABSTRACT**

Osteoarthritis is treated by a composition containing both apocynin and an inhibitor of inducible nitric oxide synthase such as curcumin. Further components such as boswellic acids, glucosamine, acetylcysteine and boron further enhance the beneficial effect of apocynin and curcumin.

**8 Claims, No Drawings**