



US 20090324727A1

(19) **United States**

(12) **Patent Application Publication**
Foguet Roca

(10) **Pub. No.: US 2009/0324727 A1**

(43) **Pub. Date: Dec. 31, 2009**

(54) **NANOEMULSION**

Publication Classification

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(51) **Int. Cl.**
A61K 9/14 (2006.01)
A61K 47/10 (2006.01)
A61K 31/195 (2006.01)
A61P 17/02 (2006.01)

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(52) **U.S. Cl.** **424/489**; 514/772; 514/561

(57) **ABSTRACT**

(73) Assignee: **BIOFRONTERA BIOSCIENCE**
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The present invention relates to a nanoemulsion comprising at least one aqueous component and a carrier, wherein the carrier comprises at least one lipophilic component, at least one surfactant and at least one alcohol, characterised in that at least one alcohol has at least three carbon atoms. The present invention further relates to a composition comprising said nanoemulsion and an active agent. In particular, the composition is present as a gel and the active agent is 5-aminolevulinic acid, a derivative, precursor and/or metabolite thereof. The invention further relates to the preparation of said nanoemulsion and/or composition and to their use for the treatment of dermatological diseases, virus-associated diseases as well as diseases associated with cell proliferation, in particular, tumor diseases and/or psoriasis. The present invention is further directed to the use of said nanoemulsion in cosmetics.

(21) Appl. No.: **12/520,759**

(22) PCT Filed: **Dec. 21, 2007**

(86) PCT No.: **PCT/EP07/11404**

§ 371 (c)(1),
(2), (4) Date: **Jun. 22, 2009**

(30) **Foreign Application Priority Data**

Dec. 22, 2006 (EP) 06026698.8

Biofrontera Exhibit 1009
Biofrontera Inc. et al. v. DUSA Pharmaceuticals, Inc.
IPR2022-00056

Fig. 1

GAUSSIAN SUMMARY:

Mean Diameter = 32.2 nm
Std. Deviation = 18.8 nm (58.3%)
Norm. Std. Dev. = 0.583
(Coeff. of Var'n)

Variance (P.I.) = 0.340
Chi Squared = 3.022
Baseline Adj. = 0.000 %
Z-Avg. Diff. Coeff. = 1.44E-007 cm²/s

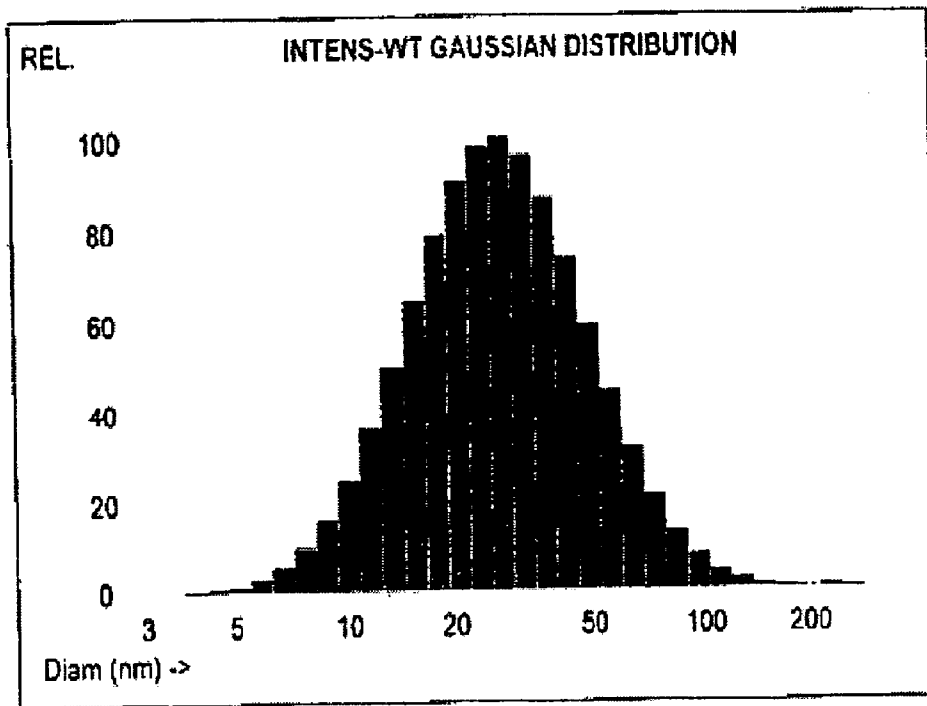


Fig. 2

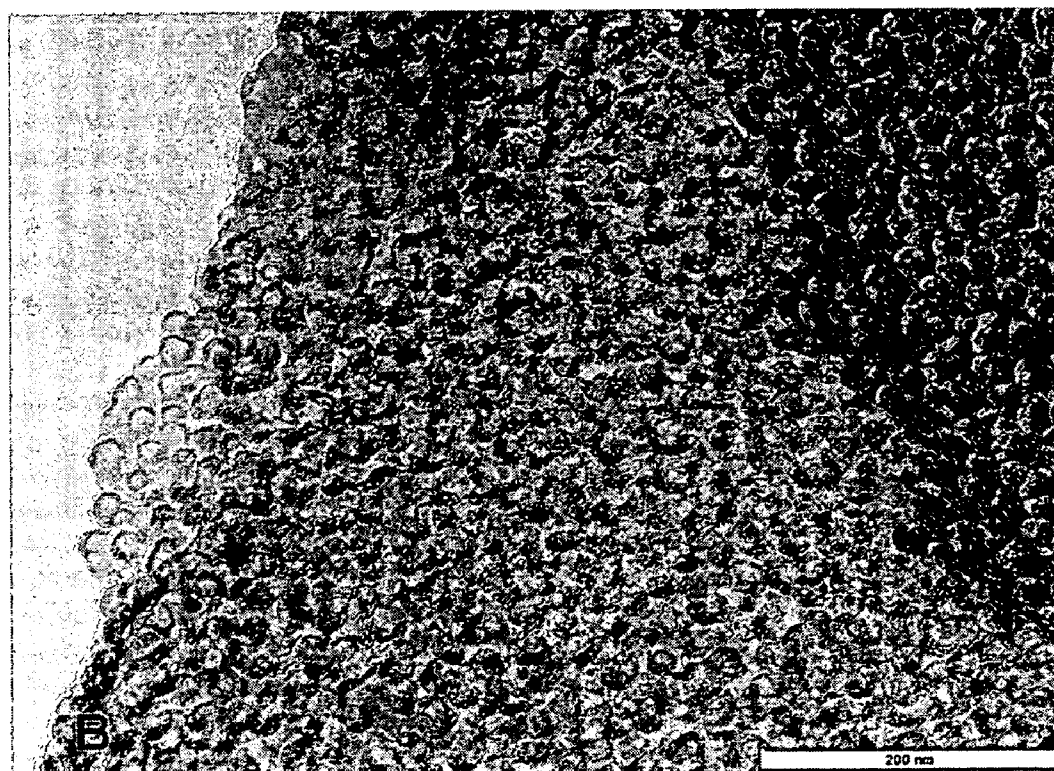
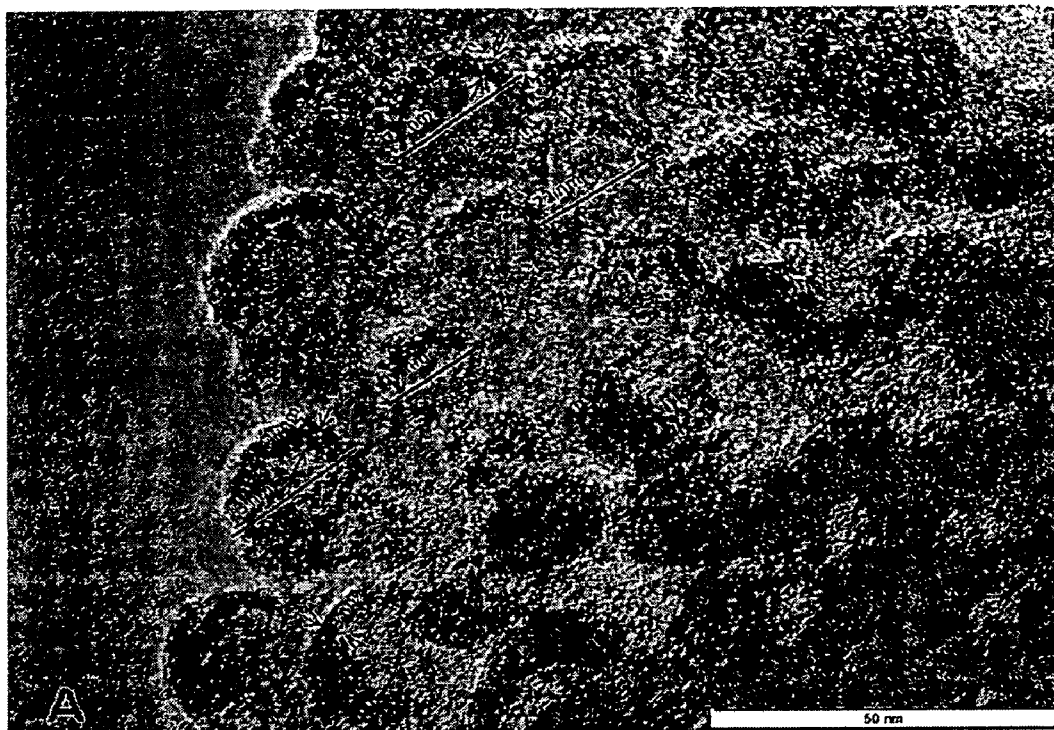


Fig. 3

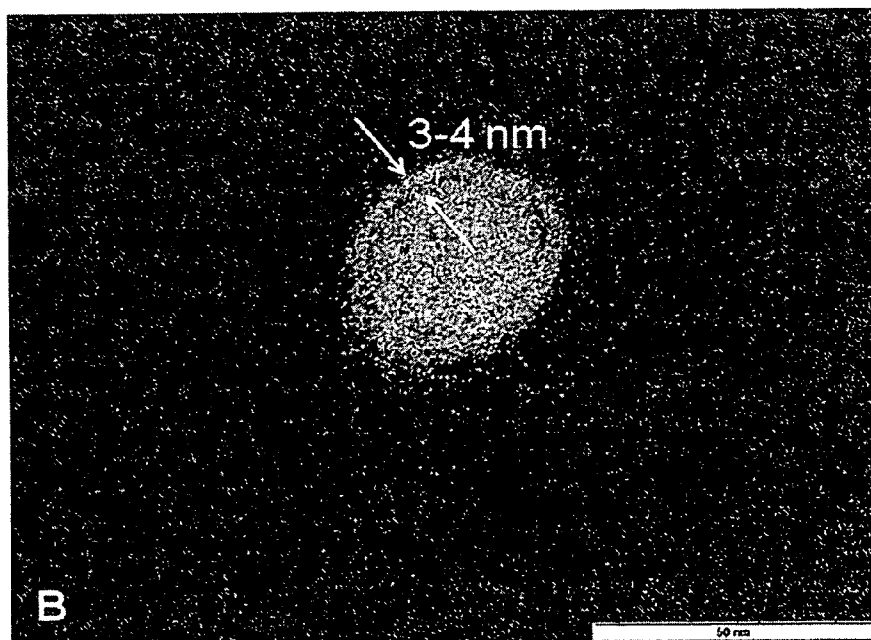
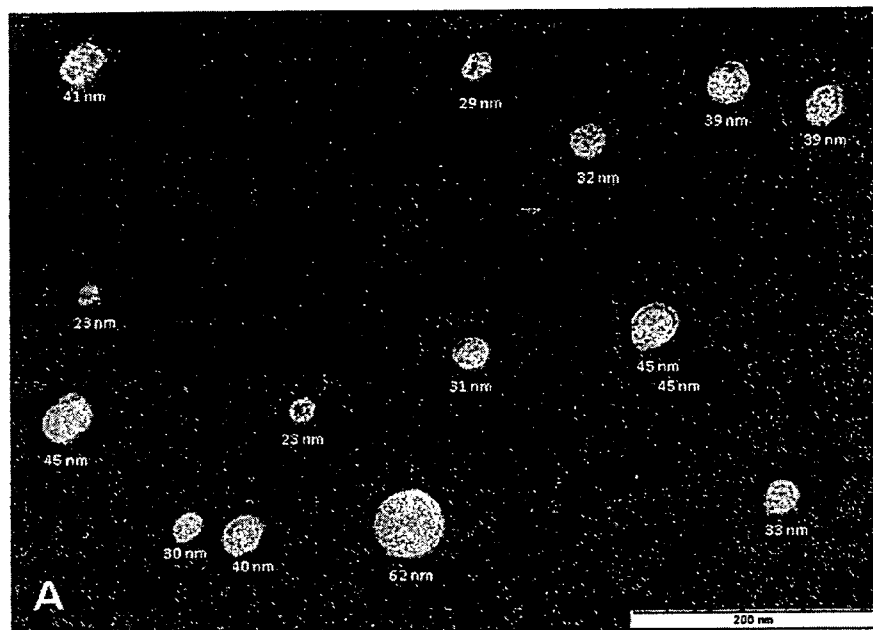
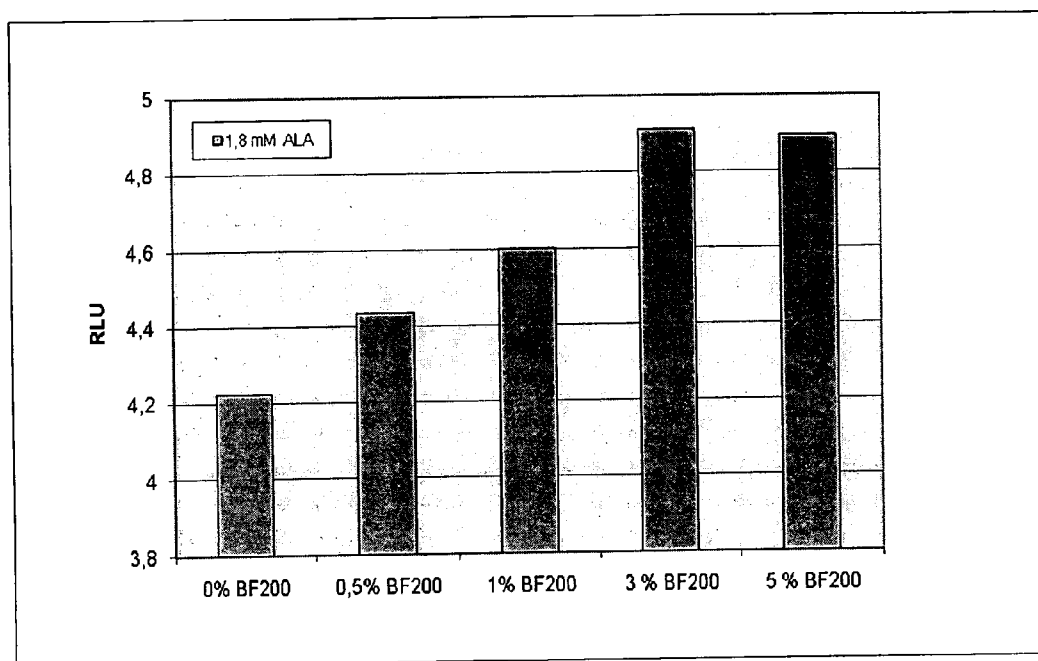


Fig. 4



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