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Cammarano et al.

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(54) **METHODS FOR THE PREPARATION OF BIOLOGICALLY ACTIVE COMPOUNDS IN NANOPARTICULATE FORM**

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A61K 31/192 (2006.01)
A61K 31/196 (2006.01)
A61K 31/496 (2006.01)
A61K 31/4535 (2006.01)
A61K 31/551 (2006.01)
A61K 9/14 (2006.01)

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CPC **A61K 31/192** (2013.01); **A61K 31/496** (2013.01); **A61K 31/4535** (2013.01); **A61K 31/551** (2013.01); **A61K 9/1617** (2013.01); **A61K 9/143** (2013.01); **A61K 31/196** (2013.01)
USPC **424/493**; 514/420; 514/567; 514/569; 514/570

(58) **Field of Classification Search**

None
See application file for complete search history.

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(57) **ABSTRACT**

A method for producing a composition comprising nanoparticles of a biologically active compound, comprising the step of: dry milling a solid biologically active compound and a millable grinding compound in a mill comprising a plurality of milling bodies, for a time period sufficient to produce a solid dispersion comprising nanoparticles of the biologically active compound dispersed in an at least partially milled grinding compound is described as are various compositions produced using such methods.

14 Claims, 26 Drawing Sheets

LUPIN EX. 1020
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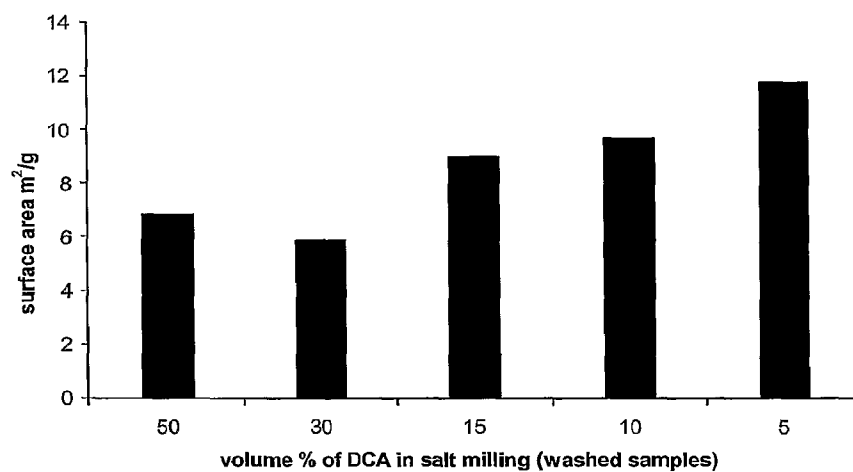


FIG. 1

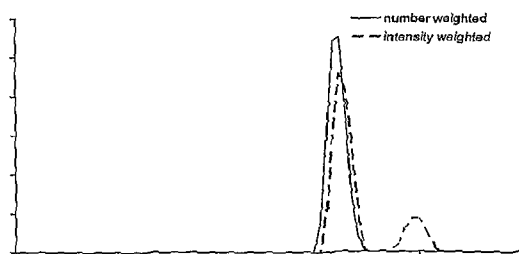


FIG. 2A

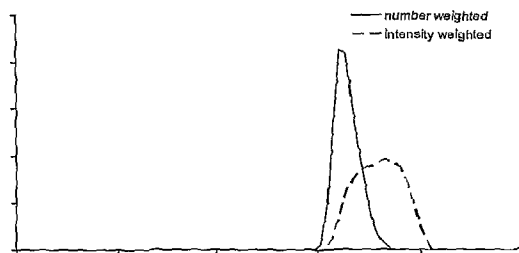


FIG. 2B

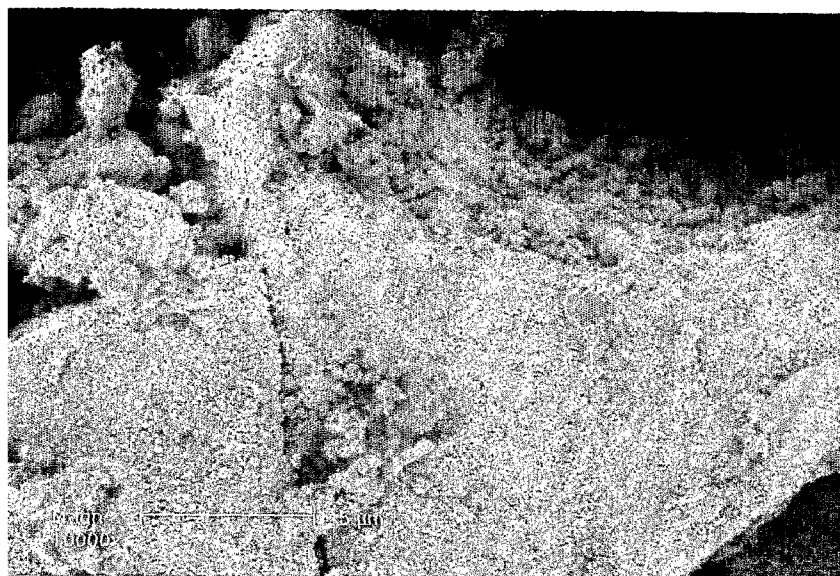


FIG. 3A

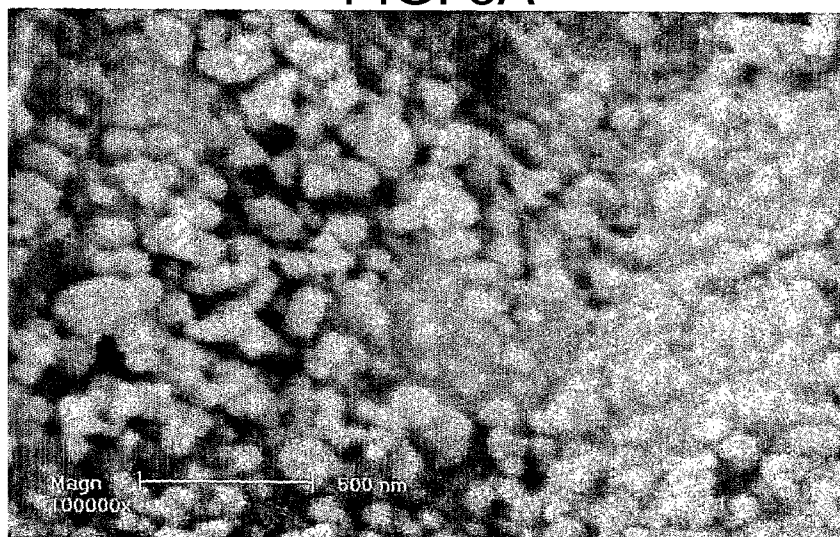


FIG. 3B

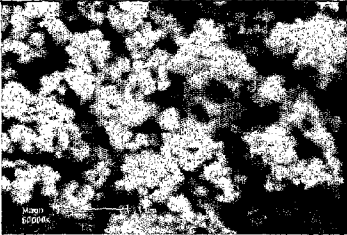
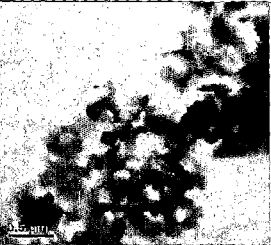
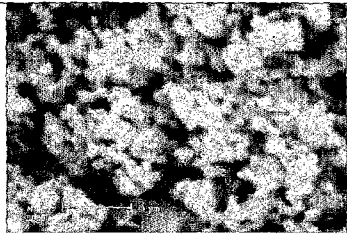
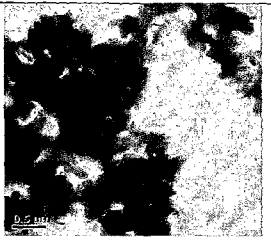
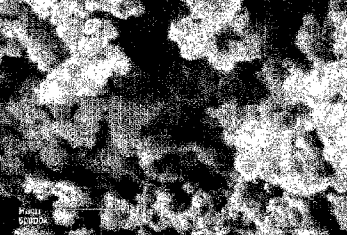
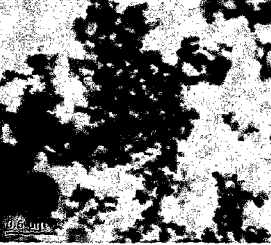
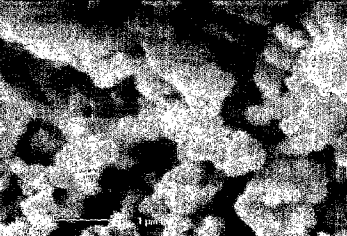
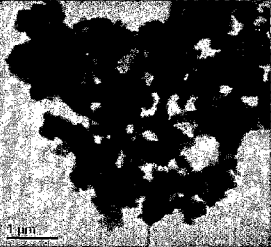


Vol %	SEM post washing	TEM post washing
5		
10		
15		
30		
50		

FIG. 4

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