

PATENT NO. 349459
METHOD FOR COATING NANO-MAGNETIC PARTICLES WITH
PHARMACOLOGICALLY ACTIVE SUBSTANCE

APPLICATION NO. 2855/MUM/2012

APPLICANT

Bhavnagar University, Gujarat, India

ABSTRACT

The present invention provides a method for coating the nanomagnetic particles using anaesthetic drug comprising the steps (i) synthesizing nano sized magnetite magnetic particles using chemical co-precipitation technique; (ii) aqueous based slurry of the said particles are further used for coating procedure; (iii) wet magnetite particles are mixed with lignocaine hydrochloride molecules in presence of carbodiimide; the above mixture is kept in rotary shaker for uniform shaking at room temperature for 3 to 5 hrs; after shaking, the coated nanomagnetic particles are washed several times with water to get rid of unreacted and/or free drug molecules.

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CLAIM 1

A method for coating the nanomagnetic particles using anaesthetic drug Lignocaine comprising the steps 5 (i) synthesizing nano sized magnetite magnetic particles using chemical co-precipitation technique; (ii) aqueous based slurry of the said particles are further used for coating procedure; (iii) wet magnetite particles are mixed with lignocaine hydrochloride 10 molecules in presence of carbodiimide; the above mixture is kept in rotary shaker for uniform shaking at room temperature for 3 to 5 hrs; (iv) after shaking, the coated nanomagnetic particles are washed several times with water to get rid of unreacted and/or free drug molecules.