



## Drug delivery system with multipolar magnet and sensor system

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Title

**(EN) DRUG DELIVERY SYSTEM WITH MULTIPOLAR MAGNET AND SENSOR SYSTEM**

**(FR) SYSTÈME D'ADMINISTRATION DE MÉDICAMENT COMPRENANT UN AIMANT MULTIPOLAIRE ET UN SYSTÈME DE CAPTEUR**

Abstract

**(EN)**

A drug delivery system comprises an indicator element and a sensor system. The indicator element is arranged to rotate relative to a reference component and corresponding to a reference axis and comprises a plurality of dipole magnets. The sensor system comprises a plurality of magnetometers arranged non-rotational relative to the reference component and adapted to determine continuous magnetic field values from the plurality of dipole magnets, as well as processor means configured to determine on the basis of measured values from the plurality of magnetometers a rotational position and/or a rotational movement of the indicator element.

**(FR)**

Un système d'administration de médicament comprend un élément indicateur et un système de capteur. L'élément indicateur est agencé pour tourner par rapport à un composant de référence et correspondant à un axe de référence et comprend une pluralité d'aimants dipolaires. Le système de capteur comprend une pluralité de magnétomètres agencés de façon non rotative par rapport au composant de référence et conçus pour déterminer des valeurs de champ magnétique continu à partir de la pluralité d'aimants dipolaires, ainsi que des moyens de traitement configurés pour déterminer, sur la base de valeurs mesurées à partir de la pluralité de magnétomètres, une position de rotation et/ou un mouvement de rotation de l'élément indicateur.

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**Fig. 5**

