

Title (en)

USE OF RNA POLYMERASE AS AN INFORMATION-DEPENDENT MOLECULAR MOTOR

Title (de)

VERWENDUNG VON RNA-POLYMERASE ALS INFORMATIONSSABHÄNGIGER MOLEKULARER MOTOR

Title (fr)

UTILISATION D'ARN POLYMERASE COMME MOTEUR MOLECULAIRE DEPENDANT D'INFORMATIONS

Publication

EP 1721000 A4 20080820 (EN)

Application

EP 04718069 A 20040305

Priority

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Abstract (en)

[origin: WO2005098038A2] Materials and methods are described in which the information dependence of RNA polymerase is employed to enable its use as a molecular motor adaptable for movement within DNA grid arrays and to actuate, move, position or alter cargo such as physical structures and normally inanimate substances and objects.

IPC 8 full level

C12N 9/12 (2006.01); **C12N 9/22** (2006.01); **C12P 19/34** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP)

B82Y 5/00 (2013.01); **C12N 9/1247** (2013.01); **C12Y 207/07006** (2013.01); **C07K 2319/80** (2013.01); **C07K 2319/81** (2013.01)

Citation (search report)

- [A] WO 03094973 A1 20031120 - MAX PLANCK GESELLSCHAFT [DE], et al
- [A] US 6210896 B1 20010403 - CHAN EUGENE Y [US]
- [A] VALE RONALD D: "The molecular motor toolbox for intracellular transport.", CELL, vol. 112, no. 4, 21 February 2003 (2003-02-21), pages 467 - 480, XP002486482, ISSN: 0092-8674
- See references of WO 2005098038A2

Citation (examination)

TEMLAKOV D ET AL: "The specificity loop of T7 RNA polymerase interacts first with the promoter and then with the elongating transcript, suggesting a mechanism for promoter clearance", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 97, no. 26, 19 December 2002 (2002-12-19), pages 14109 - 14114

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