

**Espacenet****Bibliographic data: EP2341932 (A1) — 2011-07-13****HIGH-ENERGY PULSED ELECTRIC FIELD VACCINE ADJUVANTS**

Inventor(s): ONIKIENKO SERGEY B [RU]; ZEMLYANOI ALEXANDER V [RU]; MARGULIS BORIS A [RU]; GUZHOVA IRINA V [RU]; PIMENOVA ANNA A [RU] ± (ONIKIENKO, SERGEY B, ; ZEMLYANOI, ALEXANDER V, ; MARGULIS, BORIS, A, ; GUZHOVA, IRINA V, ; PIMENOVA, ANNA, A)

Applicant(s): OOO NPT MBP GORMEZIS [RU] ± (OOO "NPT MBP GORMEZIS")

Classification: - international: A61K39/145; A61K39/29
- cooperative: A61K39/0015; A61K39/095; A61K39/12;
A61K39/145; A61K39/292; A61K39/39; A61K41/00;
A61N1/327; A61K2039/53; A61K2039/54;
A61K2039/545; A61K2039/55; A61K2039/70;
C12N2730/10134; C12N2760/16134;
C12N2760/18434; C12N2760/18734;
C12N2770/36234

Application number: EP20090754195 20090527

Priority number(s): WO2009IB05744 20090527 ; RU20080121934 20080527

Also published as: WO2009144567 (A1)

Abstract not available for EP2341932 (A1)

Abstract of corresponding document: WO2009144567 (A1)

The invention is directed to methods of administering a vaccine to a subject by exposing an area of an epidermal layer of skin or mucosa of the subject to a high-energy pulsed electric field in conjunction with administration of the vaccine. In the methods, the electric field does not cause visible skin damage or significant or irreversible damage to cells in the exposed area. The electric field acts as an adjuvant for the vaccine, increasing the efficacy and/or potency of the vaccine.