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WO2006131992	Method for producing electrode for electrochemical element and method for producing electrochemical element with the electrode GEN3 GENERAL 3 NIPPON CHEMICON
WO200638293	Method for producing electrode material GEN3 GENERAL 3 NIPPON CHEMICON
WO200638292	Electrode material and electrochemical device GEN3 NIPPON CHEMICON

Method for producing electrode for electrochemical element and method for producing electrochemical element with the electrode

WO2006131992

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- **International Patent Classification**
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- **US Patent Classification**
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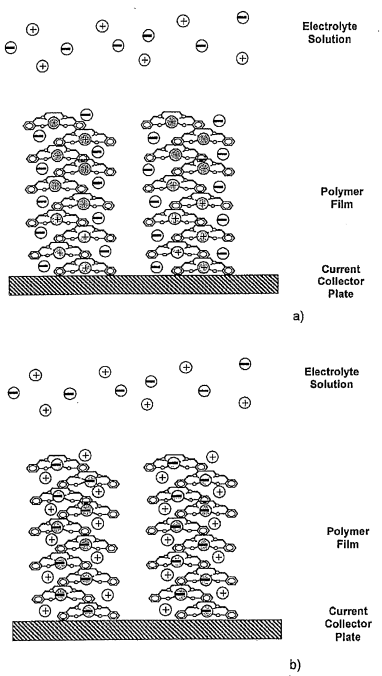
WO2006131992	A1	2006-12-14	[WO2006131992]
EP1889270	A1	2008-02-20	[EP1889270]
JP2008546210	A	2008-12-18	[JP2008546210]
US2009026085	A1	2009-01-29	[US20090026085]
EP1889270	A4	2010-05-26	[EP1889270]

- **Abstract:**
  (EP1889270)
  A method for producing an electrode for an electrochemical element absorbs monomers for polymerization on a surface having a specific surface area of 100 to 3000 m2g-1 and having an average pore diameter in the range of 0.4 to 100 nm, performing electrolysis polymerization by applying pulse voltage, and forming a conductive polymer layer on the surface of the conductive porous material, forming a thin and uniform electrode film. In a method for producing an electrochemical element, a conductive polymer layer is formed on the conductive porous material by absorbing monomers for polymerization on a surface of a conductive porous material having a specific surface area and pore diameter as above forming a electrochemical cell by using the conductive porous material, the monomers are absorbed in the pores, putting the electrochemical cell and the electrolyte solution in an outer casing, and performing electrolysis polymerization of the monomers in the electrolyte solution. (From US2009026085 A1)



Method for producing electrode material
WO200638293

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- **International Patent Classification**
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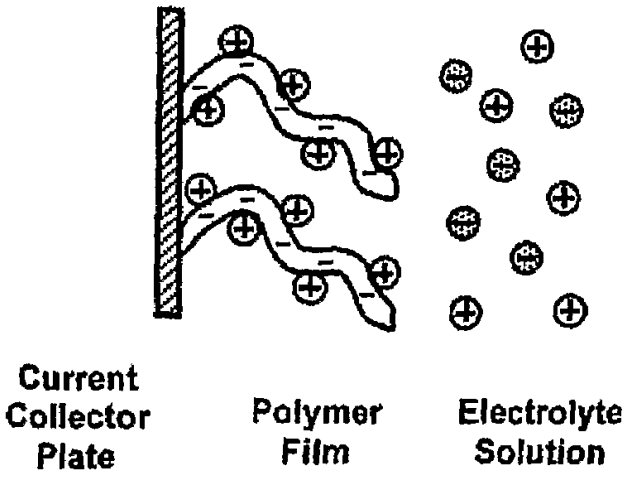
- **Publication Information**
  WO2006038293 A1 2006-04-13 [WO200638293]
- **Priority Details**
  2004WO-JP14767 2004-09-30

- **Fampat family**

WO2006038293	A1	2006-04-13	[WO200638293]
EP1807889	A1	2007-07-18	[EP1807889]
JP2008515132	A	2008-05-08	[JP2008515132]
US2008213500	A1	2008-09-04	[US20080213500]
EP1807889	A4	2009-12-16	[EP1807889]

- **Abstract:**
  (EP1807889)
  To provide a method for producing an electrode material which is improved in energy density and is excellent in output characteristics. The present invention provides a manufacturing method for the electrode material comprising the steps of: 1) immersing a conductive material having a specific surface area of 200 to 3000 m²g⁻¹in a complex monomer solution of a transition metal having at least two different oxidation numbers, 2) performing electro polymerization by applying pulse voltage using the conductive material as an electrode to stack the complex monomer under the condition that electrolyzation time is 0.1 to 60 second and a downtime is 10 to 600 second, and 3) forming on the surface of the conductive material an energy accumulating redox polymer layer containing polymer complex compound of transition metal formed by the stacked complex monomer, thereby accumulating energy via a redox reaction: wherein a thin and uniform electrode film is formed, namely the electrode material which is excellent in output characteristics and improves energy density is manufactured according to the method. (From US2008213500 A1)



Electrode material and electrochemical device
WO200638292

- **Patent Assignee**
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- **International Patent Classification**
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- **US Patent Classification**
  PCLO=528395000
- **CPC Code**
  H01G-009/155; H01M-004/04/52; H01M-004/04/66; H01M-004/137; H01M-004/60/2; H01M-004/60; H01M-010/0525; H01M-2004/028; Y02E-060/122; Y02E-060/13

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WO2006038292	A1	2006-04-13	[WO200638292]
EP1807890	A1	2007-07-18	[EP1807890]
JP2008524778	A	2008-07-10	[JP2008524778]
US2008300381	A1	2008-12-04	[US20080300381]
EP1807890	A4	2010-07-28	[EP1807890]
JP4783632	B2	2011-09-28	[JP4783632]

- **Abstract:**

(EP1807890)
To provide an electrode material excellent in output characteristics and cycle property and an electrochemical device using the electrode material. The electrode material comprising polymer complex compound represented by the following graphical formula: and the electrochemical device using the electrode material. Even if such a large size ion is employed, enhanced output characteristics could be obtained in the present invention. Polymer complex compound is polarized due to an electron attracting substituent, or steric hindrance occurs due to a substituent having a branch structure so that interval of polymer complex compound formed on the electrode is increased and doping reaction. Therefore, even if using large size ions smooth and rapid doping and undoping reaction could take place. (From US2008300381 A1)

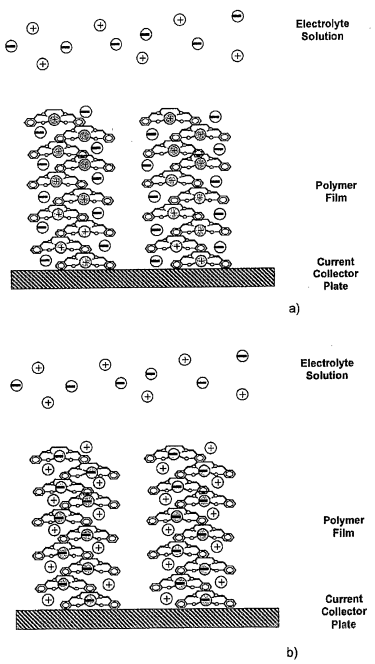

Fig. 1