Number of documents: 2

RU2575194	Metal air energy storage device POWERMERS
WO201628589	Method of producing porous metal-carbon materials POWERMERS

Metal air energy storage device
RU2575194

- **Patent Assignee**
  POWERMERS
- **Inventor**
  KARUSHEV MIKHAIL P
  BELOUS SVETLANA A
  LAVROVA TATYANA S
  CHEPURNAYA IRINA A
  TIMONOV ALEXANDER M
  KOGAN SEYMON

- **International Patent Classification**
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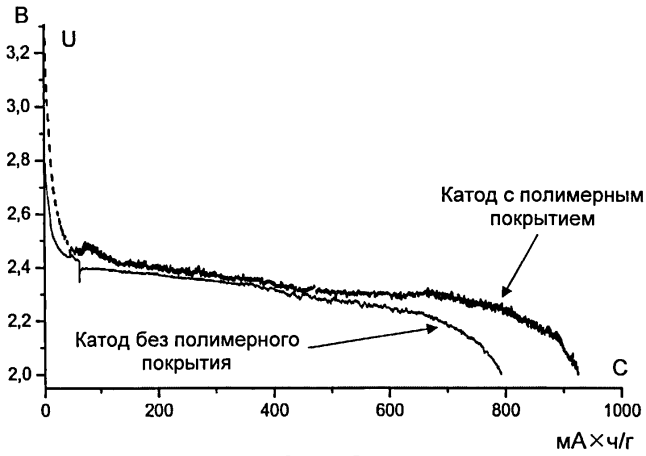
- **Priority Details**
  2014RU-0137372 2014-09-15

- **Fampat family**

RU2575194	C1	2016-02-20	[RU2575194]
WO2016044857	A1	2016-03-24	[WO201644857]
WO2016044857	A8	2016-05-19	[WO201644857]

- **Abstract:**
  (WO201644857)
  A metal air battery. In one embodiment, the metal air battery includes a metal anode; a metal ion solid electrolyte; and a cathode including a porous carbon structure coated with a transition metal polymer complex, wherein the metal polymer complex comprises a substituted tetradentate Schiff base ligand. In one embodiment, the cathode is constructed as a highly porous carbon structure coated with a nanolayer of a polymer transition metal complex.



Фиг. 8

Method of producing porous metal-carbon materials
WO201628589

- **Patent Assignee**
  POWERMERS
- **Inventor**
  KARUSHEV MIKHAIL P
  BELOUS SVETLANA A
  LAVROVA TATYANA S
  CHEPURNAYA IRINA A
  TIMONOV ALEXANDER M
  KOGAN SEYMON
- **International Patent Classification**
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  B01J-020/20; B01J-020/22/6; B01J-020/32/04; C01B-031/02; C07F-001/00/5; C07F-015/04/5; C08G-083/00; C08L-101/00; C09D-201/00; C25B-003/02; C25B-003/12; C25B-011/14; H01M-004/36/4; H01M-004/36/6; H01M-004/62/5; H01M-004/86/52; H01M-004/86/73 H01M-004/90/75

- **Publication Information**
  WO2016028589 A1 2016-02-25 [WO201628589]
- **Priority Details**
  2014US-62039010 2014-08-19
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- **Fampat family**

WO2016028589	A1	2016-02-25	[WO201628589]
US20160190601	A1	2016-06-30	[US20160190601]

- **Abstract:**
  (WO201628589)
  Claimed is a method for creating a metal-carbon composite. The method includes the steps of providing a polymer Schiff base transition metal film precursor having a chemical structure of the formula [M(Schiff)], where M is selected from the group consisting of nickel, palladium, platinum, cobalt, copper, iron; In the above Markush formula, the bridge Y has the following structure: in Salen in Saltmen in Salphen R is selected from the group consisting of H-, and carbon-containing substituents, preferably CH3-, C2H5-, CH3O-, C2H5O-. Disclosed is a method of depositing the Schiff base transition metal onto a support substrate, and electropolymerizing the material to a film, followed by heating the polymeric Schiff base transition metal film on the support substrate in a furnace under an inert atmospher to obtain a porous metal-carbon material with favorable properties for use as electrode material in devices such as fuel cells, double layer capacitors, lithium-ion and lithium polymer batteries.