Number of documents: 5

WO200317451	Magneto-electric machine of linear type ENGEN
WO200318469	Electrochemical reacting electrode, method of making, and application device ENGEN GENERAL YEN
WO200258201	Stationary energy center ENGEN
WO200365536	Polymer-modified electrode for energy storage devices and electrochemical supercapacitor based on said polymer-modified electrode ENGEN GENERAL YEN POWERMERS
WO200256397	Hybrid high temperature fuel cell volume expansion heat engine ENGEN POWERMERS

Magneto-electric machine of linear type
WO200317451

- **Patent Assignee**
  ENGEN
- **Inventor**
  KASHKAROV ALEXANDER G
  SHKOLNIK NIKOLAY
  LOGVINOV SERGEY ANATOLIEVICH
  EVSEEV RUDOLF K
- **International Patent Classification**
  H02K-033/16 H02K-035/02 H02K-041/03
- **US Patent Classification**
  PCLO=310012190 PCLX=310012250
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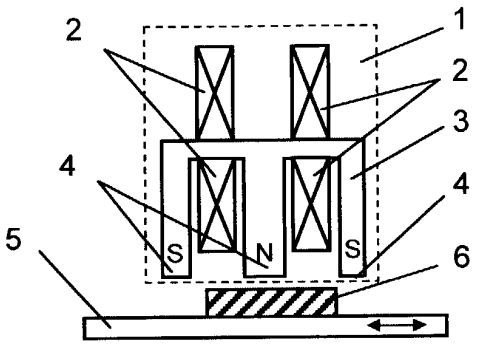
- **Publication Information**
  WO03017451 A1 2003-02-27 [WO200317451]
- **Priority Details**
  2001US-60313837 2001-08-21
  2001US-60313841 2001-08-21
  2001US-60313847 2001-08-21
  2001US-60313965 2001-08-21
  2002US-10224282 2002-08-20

- **Fampat family**

WO03017451	A1	2003-02-27	[WO200317451]
US2003048011	A1	2003-03-13	[US20030048011]

- **Abstract:**
  (WO200317451)
  The invention claimed here refers to electrical engineering and may be used to convert mechanical energy of reciprocating motion to electrical energy and vice versa. The machine has a stator with windings and a moving body installed in such a way that a possibility of reciprocating motion is provided. The stator has at least one magnetic part, each of which has at least one permanent magnet and has at least three unidirectional projections that form magnetic poles of alternating polarity. The cavities are formed between the projections, with stator windings placed in said cavities. The moving body has at least one part made of magnetically soft material. The stator and the moving body are positioned so that the moving body part made of magnetically soft material, in the course of the motion of the moving is (at least partially) within the magnetic fields of the poles of the magnetic part of the stator. The invention may be used for the creation of linear electric machines characterized by high dynamic characteristics, high efficiency and low weight and size.



Electrochemical reacting electrode, method of making, and application device
WO200318469

- **Patent Assignee**
  ENGEN GENERAL YEN
- **Inventor**
  TIMONOV ALEXANDER M
  LOGVINOV SERGEY ANATOLIEVICH
  SHKOLNIK NIKOLAY
  KOGAN SAM
- **International Patent Classification**
  C25B-001/13 C25B-009/10 C25B-011/03 C25B-011/08 C25B-011/10 C25B-011/12 H01M-004/86 H01M-004/88 H01M-004/90 H01M-004/92 H01M-004/96 H01M-008/10
- **US Patent Classification**
  PCLO=205170000 PCLX=204252000 PCLX=204290010 PCLX=205183000
- **CPC Code**
  C25B-001/13; C25B-009/10; C25B-011/03/5; H01M-004/86/05; H01M-004/88/1; H01M-004/88/82; H01M-004/92/1; H01M-004/92/6; H01M-004/92; Y02E-060/50

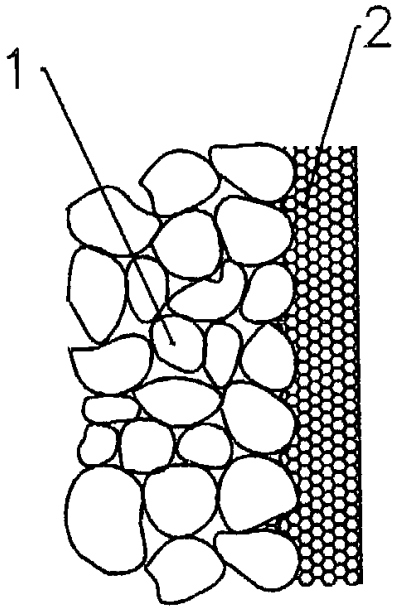
- **Publication Information**
  WO03018469 A1 2003-03-06 [WO200318469]
- **Priority Details**
  2001US-60314064 2001-08-22
  2002US-10225444 2002-08-21
  2002US-60383880 2002-05-29
  2002WO-US26653 2002-08-21

- **Fampat family**

WO03018469	A1	2003-03-06	[WO200318469]
US2003047459	A1	2003-03-13	[US20030047459]
EP1434734	A1	2004-07-07	[EP1434734]
JP2005501177	A	2005-01-13	[JP2005501177]

- **Abstract:**

(EP1434734)
The present invention refers to methods for the manufacture of gas-diffusion electrodes to be used for water electrolysis and ozone production, as well as electrodes for fuel cells and other electrochemical devices. A portion of protons of an ion-exchange polymer is substituted in the channels of a channel-cluster structure of an ion-exchange polymer with cations of metal catalyst. This substitution is performed via the ion exchange process. Then said cations are electrochemically reduced in the form of metal particles of a catalyst on those areas of substrate where the latter is in contact with the channels of the channel-cluster structure of the ion-exchange polymer layer. (From US2003047459 A1)



Stationary energy center
WO200258201

- **Patent Assignee**
  ENGEN
- **Inventor**
  SHKOLNIK NIKOLAY
  LOGVINOV SERGEY ANATOLIEVICH
  KOBLENTS PAVEL YURIEVICH
  SHLIAKHTENKO ANDREY NIKOLAEVIC
  KOGAN SAM
  PIVUNOV DMITRY IVANOVICH
  SMIRNOV PAVEL
- **International Patent Classification**
  H01M-008/00 H01M-008/02 H01M-008/04 H01M-008/06 H01M-008/12
- **US Patent Classification**
  PCLO=429425000 PCLX=429413000 PCLX=429430000 PCLX=429436000 PCLX=429444000
- **CPC Code**
  H01M-008/00; H01M-008/04/022; H01M-008/04/089; H01M-008/04/111; H01M-008/06/12; H01M-2008/1293; H01M-2250/405; Y02B-090/16; Y02E-060/50; Y02E-060/525; Y02E-070/20

- **Publication Information**
  WO02058201 A2 2002-07-25 [WO200258201]
- **Priority Details**
  2001US-60262877 2001-01-17
  2002US-10051613 2002-01-17
  2002WO-US01372 2002-01-17

- **Fampat family**

WO02058201	A2	2002-07-25	[WO200258201]
AU2002241913	A1	2002-07-30	[AU2002241913]
US2002114985	A1	2002-08-22	[US20020114985]
WO02058201	A3	2002-11-14	[WO200258201]

- **Abstract:**

(WO200258201)
A stationary power plant intended for use in houses and industrial or commercial buildings includes a high temperature fuel cell (6), a reformer (3) for converting hydrocarbon fuel into a fuel mixture of hydrogen and carbon monoxide, a combustion chamber (13) and a volume expansion engine (14). The fuel mixture from the reformer (3) enters the fuel cell (6), where it is processed along with oxygen from the air to produce electricity. The hot gases exiting the fuel cell (6), including unprocessed fuel, are passed to the combustion chamber (13) where the fuel remnants are burned resulting in better fuel efficiency. The exhaust from the combustion chamber (13) drives the volume expansion engine (14). The fuel cell (6), combustion chamber (13) and volume expansion engine (14) combination provides better dynamic load response than other fuel-cell-based power plants. One example of an entire building fuel cell power plant is disclosed which can operate in various modes to drive or thermally modify building water, air, sewage, and/or electricity.

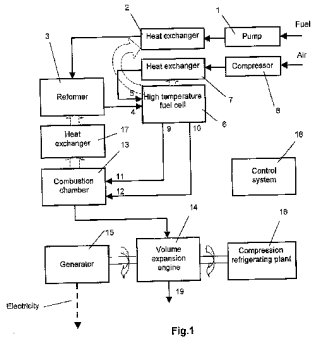


Fig.1

Polymer-modified electrode for energy storage devices and electrochemical supercapacitor based on said polymer-modified electrode

WO200365536

- **Patent Assignee**
  ENGEN GENERAL YEN POWERMERS
- **Inventor**
  TIMINOV ALEXANDER M
  LOGINOV SERGEY A
  SHKOLNIK NIKOLAY
  KOGAN SAM

- **International Patent Classification**
  H01G-004/005 H01G-004/35 H01G-009/00 H01G-009/022 H01G-009/04 H01G-009/042 H01G-009/22 H01G-011/00 H01G-011/02 H01G-011/26 H01G-011/48 H01M-004/02 H01M-004/137 H01M-004/60 H01M-004/66 H01M-006/00 H01M-006/36 H01M-010/05
- **US Patent Classification**
  PCLO=361303000 PCLX=252062200 PCLX=361305000 PCLX=361502000 PCLX=361504000 PCLX=361508000 PCLX=361512000 PCLX=429213000
- **CPC Code**
  H01G-009/22; H01G-011/02; H01G-011/26; H01G-011/48; H01M-004/137; H01M-004/60/2; H01M-004/60/6; H01M-004/60; H01M-006/36; Y02E-060/122; Y02E-060/13

- **Publication Information**
  WO03065536 A2 2003-08-07 [WO200365536]
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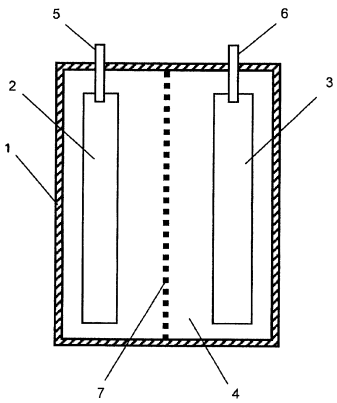
  2002US-60351681 2002-01-25
  2003EP-0703955 2003-01-23
  2003US-10350167 2003-01-23
  2003WO-US01918 2003-01-23

- **Fampat family**

WO03065536	A2	2003-08-07	[WO200365536]
CA2474484	A1	2003-08-07	[CA2474484]
AU2003205280	A1	2003-09-02	[AU2003205280]
WO03065536	A3	2004-01-29	[WO200365536]
US2004057191	A1	2004-03-25	[US20040057191]
US6795293	B2	2004-09-21	[US6795293]
KR20040088042	A	2004-10-15	[KR20040088042]
EP1500151	A2	2005-01-26	[EP1500151]
JP2005516424	A	2005-06-02	[JP2005516424]
EP1500151	A4	2009-02-11	[EP1500151]
JP4482334	B2	2010-06-16	[JP4482334]
KR101128198	B1	2012-03-23	[KR101128198]
CA2474484	C	2013-03-26	[CA2474484]
EP1500151	B1	2014-04-30	[EP1500151]
DK1500151	T3	2014-07-21	[DK1500151T]
SI1500151	T1	2014-08-29	[SI1500151T]

- **Abstract:**
  (WO200365536)
  An energy storage device (1), such as a battery or supercapacitor, that includes at least two electrodes (2 & 3), at least one of the electrodes (2) includes an electrically conducting substrate having a layer of energy accumulating redox polymer complex compound of transition metal having at least two different degrees of oxidation, which polymer complex compound is formed of stacked transition metal complex monomers. The stacked transition metal complex monomers have a planar structure with the deviation from the plane of no greater than 0.1 nm and a branched system of conjugated pi-bonds. The polymer complex compound of transition metal can be formed as a polymer metal complex with substituted tetra-dentate Schiff's base. The layer thickness of redox polymer is



within the range 1 nm-20 µm.

Hybrid high temperature fuel cell volume expansion heat engine
WO200256397

- **Patent Assignee**
  ENGEN POWERMERS
- **Inventor**
  LOGINOV SERGEY ANATOLIEVICH
  SHKOLNIK NIKOLAY
  KOBLENTS PAVEL YURIEVICH
  SHLIAKHTENKO ANDREY NIKOLAEVIC
  KOGAN SAM
  PIVUNOV DMITRY IVANOVICH
  ABASHKIN VASILY GENNADIEVICH
- **International Patent Classification**
  F02C-005/00 F02G-001/00 F02G-003/00 H01M H01M-008/04 H01M-008/06
- **US Patent Classification**
  PCLO=060039600 PCLX=060698000
- **CPC Code**
  H01M-008/04/014; H01M-008/04/097; H01M-008/06/12; Y02E-060/50

- **Publication Information**
  WO02056397 A2 2002-07-18 [WO200256397]
- **Priority Details**
  2001US-10022921 2001-12-18
  2001US-60260863 2001-01-10
  2002WO-US00177 2002-01-04

- **Fampat family**

WO02056397	A2	2002-07-18	[WO200256397]
US2002092287	A1	2002-07-18	[US20020092287]
AU2002243465	A1	2002-07-24	[AU2002243465]
US6606850	B2	2003-08-19	[US6606850]
WO02056397	A3	2003-10-16	[WO200256397]

- **Abstract:**

(WO200256397)
A power plant includes a high temperature fuel cell (6), a volume expansion heat engine (11) producing mechanical energy, and a combustion chamber (9) coupled to receive from said fuel cell at least a portion of unconsumed fuel and apply high pressure combusted gases to the engine. A reformer (3) can feed fuel to said fuel cell. A distributor (8) distributes fuel cell exhaust fuel selectively to the reformer and the combustion chamber and varies the ratio of exhaust fuel fed to the reformer and combustion chamber in accordance with predetermined power desired from said fuel cell and engine.