**Claim rejection under 35 USC 112**

**The following is a quotation of the first paragraph of 35 U.S.C. 112(a):**

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilledin the art to which it pertains,or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplatedby the inventor or joint inventor of carrying out the invention.

**The following is a quotation of 35 U.S.C. 112(b):**

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctlyclaiming the subject matter which the inventor or a joint inventor regards as the invention.  
The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA),second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim rejection under 35 USC 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(a)(1) the claimed invention was patented, described in a printed publication, orin public use, on sale or otherwise available to the public before the effectivefiling date of the claimed invention.

Claims 1-19 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by XXXXX et al (US )

Claim rejection under 35 USC 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this titleif the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimedinvention to a person having ordinary skill in the art to which the claimed invention pertains.Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103 as being unpatentable over XXXXXXX (US 20160142003) in view of XXXXXXX. (US ).

**Regarding claim 1**. A rotary electric system, comprising:  
a rotary electric device including: a stator provided with a stator winding; and a rotor, wherein the stator winding includes: a first coil group that generates a rotating magnetic field to rotate the rotor; and a second coil group that generates power with induced electromotive force due to rotation of the rotor.   
   
**Regarding claim 2**. The rotary electric system according to claim 1, further comprising a driving power-conversion circuit that in conjunction with the first coil group, constitutes a driving polyphase alternating-current circuit configured to rotate the rotor.   
   
**Regarding claim 3**. The rotary electric system according to claim 2, wherein the current value and phase of current to be applied to the first coil group are adjusted in the driving power-conversion circuit to control torque to be generated by the rotary electric device.   
   
**Regarding claim 4**. The rotary electric system according to claim 3, further comprising a power-generating power-conversion circuit that in conjunction with the second coil group, constitutes a power generation polyphase alternating-current circuit configured to output the power generated by rotation of the rotor, to the outside.   
   
**Regarding claim 5**. The rotary electric system according to claim 4, wherein the ratio of a motor driving operation to rotate the rotor to a power generating operation to generate the power is controlled by adjusting on and off periods of a switching element of a converter circuit constituting the power-generating power-conversion circuit.   
   
**Regarding claim 6**. The rotary electric system according to claim 4, further comprising a power generation load that stores the power outputted from the power-generating power-conversion circuit, wherein  
the power stored in the power generation load is used to rotate the rotor.   
   
**Regarding claim 7**. The rotary electric system according to claim 6, wherein the power-generating power-conversion circuit and the power generation load implement a function to supply the power stored in the power generation load to the second coil group as an opposite flow of energy to that in the case where the power is stored in the power generation load and generate a rotating magnetic field to rotate the rotor.   
   
**Regarding claim 8**. The rotary electric system according to claim 3, wherein each of the first and second coil groups constitutes a three-phase alternating-current circuit.   
   
**Regarding claim 9**. The rotary electric system according to claim 3, wherein an output ratio of the output of the motor driving operation due to the first coil group and the output of the power generating operation due to the second coil group is adjusted to allow the rotary electric device to operate at an operating point where the total efficiency of an apparatus driven by the rotary electric device and the rotary electric device is maximized.   
   
**Regarding claim 10**. The rotary electric system according to claim 3, wherein q-axis current is applied to the first coil group while q-axis current of an opposite polarity to that of the first coil group is applied to the second coil group.   
   
**Regarding claim 11**. The rotary electric system according to claim 3, wherein the rotary electric system performs a control to reduce terminal voltage of the rotary electric device under load by applying q-axis current to the first coil group while applying q-axis current of an opposite polarity to that of the first coil group to the second coil group.