**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 skilled in 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 contemplated by 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 distinctly   
claiming 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,

**Regarding claim 1**. A method of controlling an electrical machine, wherein the method comprises:  
a) injecting a first voltage waveform (uh x ) with a first fundamental frequency into the electrical machine in a first axis of a rotor reference frame, combined with a voltage signal for controlling the electrical machine, b) determining a second axis current component (iq h x ) of a second axis of the rotor reference frame, having the first fundamental frequency, generated in response to the injection of the first voltage waveform (uh x ), c) controlling, based on the second axis current component (iq h x ), a second axis voltage component (uq h x ) of the second axis, having the first fundamental frequency, to obtain an adjusted second axis voltage component (uq h x ) for controlling the second axis current component (iq h x ) towards zero, d) feeding back the adjusted second axis voltage component to combine the adjusted second axis voltage component with the voltage signal and the injected first voltage waveform (uh x ), and repeating steps b)-d) until the second axis current component (iq h x ) is smaller than a threshold value, e) determining a differential cross-coupling parameter of the electrical machine based on the second axis voltage component (uq h x ) and a first axis current component (iq h x ) having the first fundamental frequency, when the second axis current component (iq h x ) is smaller than the threshold value, and g) controlling the electrical machine-(based on the differential cross-coupling parameter.   
   
**Regarding claim 2**. The method as claimed in claim 1, comprising f) determining an electric angle error ({tilde over (Î¸)}) based on the differential cross-coupling parameter, wherein the electric angle error ({tilde over (Î¸)}) is used for error compensation in step g) of controlling.   
   
**Regarding claim 3**. The method as claimed in claim 2, comprising h) injecting a second voltage waveform (uh y ) with a second fundamental frequency into the electrical machine in the first axis of the rotor reference frame, combined with the voltage signal for controlling the electrical machine, and i) determining an observed electric angle (Î¸observer) based on the second voltage waveform (uh y ), wherein the method includes j) determining an actual electric angle (Î¸me) based on the observed electric angle (Î¸observer) and the electric angle error ({tilde over (Î¸)}), and wherein the controlling in step g) is based on the actual electric angle (Î¸me).   
   
**Regarding claim 4**. The method as claimed in claim 3, wherein step i) includes i1) determining a second axis current component (iq h y ) of the second axis of the rotor reference frame, having the second fundamental frequency, generated in response to the injection of the second voltage waveform (uh y ), i2) demodulating the second axis current component (iq h y ), i3) low-pass filtering the demodulated second axis current component, and i4) controlling the low-pass filtered second axis current component to zero, to thereby obtain an actual mechanical speed times the number of pole pairs (Ïme), and i5) determining the observed electric angle (Î¸observer) by integration of the actual mechanical speed times the number of pole pairs (Ïme).   
   
**Regarding claim 5**. The method as claimed in 3, comprising performing steps a)-e) only when the electrical machine is operated at a speed which is at least 10% of a nominal speed of the electrical machine and not higher than the nominal speed.   
   
**Regarding claim 6**. The method as claimed in claim 5, comprising interpolating the differential cross-coupling parameter or the electric angle error ({tilde over (Î¸)}) determined based on the differential cross-coupling parameter for a specific torque at a speed which is at least 10% of the nominal speed of the electrical machine and not higher than the nominal speed to the same torque for a speed which is lower than 10% of the nominal speed of the electrical machine, and storing the interpolated differential cross-coupling parameter or electric angle error ({tilde over (Î¸)}) in a look-up table.   
   
**Regarding claim 7**. The method as claimed in claim 3, comprising performing steps h)-j) and g) only when the electrical machine is operated at a speed which is lower than 10% of a nominal speed of the electrical machine (9).   
   
**Regarding claim 8**. The method as claimed in claim 34, wherein steps a) and h) are performed simultaneously, wherein the first fundamental frequency is a non-integer multiple of the second fundamental frequency.   
   
**Regarding claim 9**. The method as claimed in claim 8, wherein the first fundamental frequency is a first prime number and the second fundamental frequency is a second prime number.   
   
**Regarding claim 10**. The method as claimed in claim 1, wherein the differential cross-coupling parameter is a differential cross-coupling inductance or a differential cross-coupling flux.   
   
**Regarding claim 11**. The method as claimed in claim 1, wherein the differential cross-coupling parameter is a differential cross-coupling inductance, and wherein step e) involves integrating the second axis voltage component (uq h x ) and multiplying the integrated second axis voltage component (uq h x ) with the inverse of the first axis current component (iq h x ) having the first fundamental frequency to obtain the differential cross-coupling parameter.   
   
**Regarding claim 12**. The method as claimed in claim 1, wherein step a) of determining the second axis current component (iq h x ) involves filtering a non-filtered second axis current component (iq) with a filter that has a center frequency at the first fundamental frequency, to obtain the second axis current component (iq h x ).   
   
**Regarding claim 13**. A computer program comprising computer executable components which when executed by processing circuitry of a control system causes the control system to perform the steps of the method as claimed in claim 1.   
   
**Regarding claim 14**. A control system for controlling an electrical machine, wherein the control system comprises:  
processing circuitry, and a storage medium having a computer program which when executed by the processing circuitry causes the control system to perform the steps of a method including: a) injecting a first voltage waveform (uh x ) with a first fundamental frequency into the electrical machine in a first axis of a rotor reference frame, combined with a voltage signal for controlling the electrical machine, b) determining a second axis current component (iq h x ) of a second axis of the rotor reference frame, having the first fundamental frequency, generated in response to the injection of the first voltage waveform (uh x ), c) controlling, based on the second axis current component (iq h x ), a second axis voltage component (uq h x ) of the second axis, having the first fundamental frequency, to obtain an adjusted second axis voltage component (uq h x ) for controlling the second axis current component (iq h x ) towards zero, d) feeding back the adjusted second axis voltage component to combine the adjusted second axis voltage component with the voltage signal and the injected first voltage waveform (uh x ) and repeating steps b)-d) until the second axis current component (iq h x ) is smaller than a threshold value, e) determining a differential cross-coupling parameter of the electrical machine based on the second axis voltage component (uq h x ) and a first axis current component (id h x ) having the first fundamental frequency, when the second axis current component (iq h x ) is smaller than the threshold value, and g) controlling the electrical machine based on the differential cross-coupling parameter.   
   
**Regarding claim 15**. An electrical power system comprising:  
an electrical machine, a power converter configured to control the electrical machine, and a control system configured to control the power converter, wherein the control system includes: processing circuitry, and a storage medium having a computer program which when executed by the processing circuitry causes the control system to perform the steps of a method including: a) injecting a first voltage waveform (uh x ) with a first fundamental frequency into the electrical machine in a first axis of a rotor reference frame, combined with a voltage signal for controlling the electrical machine, b) determining a second axis current component (iq h x ) of a second axis of the rotor reference frame, having the first fundamental frequency, generated in response to the injection of the first voltage waveform (uh x ), c) controlling, based on the second axis current component (iq h x ), a second axis voltage component (uq h x ) of the second axis, having the first fundamental frequency, to obtain an adjusted second axis voltage component (uq h x ) for controlling the second axis current component (iq h x ) towards zero, d) feeding back the adjusted second axis voltage component to combine the adjusted second axis voltage component with the voltage signal and the injected first voltage waveform (uh x ), and repeating steps b)-d) until the second axis current component (iq h x ) is smaller than a threshold value, e) determining a differential cross-coupling parameter of the electrical machine based on the second axis voltage component (uq h x ) and a first axis current component (id h x ) having the first fundamental frequency, when the second axis current component (iq h x ) is smaller than the threshold value, and q) controlling the electrical machine based on the differential cross-coupling parameter.   
   
**Regarding claim 16**. The method as claimed in 4, comprising performing steps a)-e) only when the electrical machine is operated at a speed which is at least 10% of a nominal speed of the electrical machine and not higher than the nominal speed.   
   
**Regarding claim 17**. The method as claimed in claim 4, wherein steps a) and h) are performed simultaneously, wherein the first fundamental frequency is a non-integer multiple of the second fundamental frequency.