Claims

1. Control method for an acceleration of a vacuum pump, in particular a turbomolecular pump, having an electric motor and a control device, in which

   in a first acceleration phase, the input current of the control device increases up to a maximum value $I_{s,max,}$

   in a second acceleration phase, the control device is operated at the maximum value $I_{s,max}$ of the input current, and

   a rated speed n_{max} of the vacuum pump is reached at the end of the second acceleration phase.

2. Control method of claim 1, wherein the input current of the control device decreases to an operating value after the second acceleration phase.

3. Control method of one of claims 1 to 2, wherein, in the first acceleration phase, the input current of the control device increases, in particular in a constant manner, to the maximum value $I_{s,max}$.

4. Control method of claim 3, wherein the input current of the control device reaches the maximum value $I_{s,max}$ at the end of the first acceleration phase.

5. Control method of one of claims 1 to 4, wherein the motor current is constant during the first acceleration phase, the motor current in particular having a constant maximum value $I_{s,max}$.

6. Control method of one of claims 1 to 5, wherein the motor current decreases during the second acceleration phase.

7. Control method of one of claims 1 to 6, wherein the motor current decreases to an operating value after the second acceleration phase.

8. Control method of one of claims 1 to 7, wherein the rotational speed of the vacuum pump increases in the first acceleration phase and in the second acceleration phase.

9. Control method of claim 8, wherein the rotational speed of the vacuum pump increases faster in the first acceleration phase than in the second acceleration phase.