

SUMMARY

The diploma project comprises: pages 105, figures 28, tables 12, appendix 3 and the graphical part on 4 pages A1.

In this thesis project the calculation of the power converter was performed and its elements was selected, a configuration of a designed electric vehicle of an electric vehicle was chosen.

Also, the algorithm for direct vector control of the moment and the flow coupling of the synchronous motor was synthesized, which provided the synchronous motor control system with such properties as global exponential processing of the given torque and moment and also reached the solvability in control of torque and the flow coupling. This algorithm was simulated in the Simnon environment, taking into account the total inertia moment for a fully loaded and non-loaded electric vehicle.

SYNCHRONOUS ENGINE, ELECTRICAL VEHICLE, VECTOR CONTROL, SYNTHESIS, CHARACTERISTICS, STRUCTURAL SCHEME, INVERTER, MOSFET, IGBT.

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Devel.	D. Voloshinenko					7		
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N. Contr.								
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