Abstract
Depleted resources of hydrocarbon fuels and environmental problems that arise from the mass application of internal combustion engines offer a chance for rapid development of electrified transport. The barriers currently limiting the mass introduction of electric cars to the general public are mainly due to constraints related to the search for a suitable electrical source for the vehicle and absence of the infrastructure to support electrified transport. With a sufficiently large financial outlay and increased involvement of the scientific and research communities, the quick resolution of these problems is undoubtedly possible.

Introduction
The development of electric car transport began in the first half of the 19th century and after a period of oblivion is back again. Not everyone knows that the pioneering vehicles that can be called cars were electric vehicles. Although the first car shall be deemed the design of the American Thomas Davenport of 1834, in Europe between 1832 and 1839, a Scottish businessman Robert Anderson invented the first crude electric carriage, and perhaps he is entitled to priority, [2]. The invention of the lead-acid batteries by Gaston Plante in 1865, their improvement by Camille Faure in 1881 and the development of better electric motors opened the way for the advancement of electric vehicles. Until the First World War, before the widespread polluting internal combustion (IC) engines, electric vehicles had beaten many speed and distance records. One of the most notable events of those times was the first time that a road vehicle crossed the barrier speed of 100 km/h with driver Camille Jenatzy on 29 April 1899, [2]. The electric vehicle, La Jamais Contente, powered by two electric motors with a total output of 100hp reached a maximum speed of 105.88 km/h. The threat of depletion of the profitable resources of hydrocarbon fuels used as a primary energy source for IC engines as well as the multi-level environmental and health hazards—generally threatening human existence—has necessitated the search for a way out of this impasse. The quick search for another resource that could be used for transport and that would also protect users from the serious health risks posed by IC engines became an imperative at the beginning of the XXI century. It is believed that the electric motor could be one such solution. The electric motor is environmentally friendly, is three times more efficient than the IC engine and perfectly meets the conditions required in drive vehicles, namely engine produced torque and power change as a function of speed. What is more, the electrical energy necessary for its operation could be acquired from sustainable energy sources.

Conclusions
Depleted resources of liquid fossil fuels and environmental problems spawned the reconsideration of electric vehicles. This is not an easy and fast process since it is determined by a number of factors. It is undoubtedly a positive fact that electric motors used to drive electric vehicles are more than three times as efficient as internal combustion engines and have the characteristics of change in power and torque produced as a function of speed perfectly matching the requirements stemming from vehicle propulsion. An inhibiting factor still requiring a solution is the electrical energy source in vehicles and the possibility of rapid recharging. Great efforts are being made to overcome the problems associated with widespread use of fuel cells in vehicles, which would help solve this problem. Optimists say that within half a century it will be possible to overcome this limitation and produce the necessary electricity for charging using eco-friendly renewable WWS energy sources. Some obstacles of possibly implementing the WWS system are political in nature, not technical. Despite the many difficulties in sales, there have been many interesting solutions for electric vehicles, but their primary drawbacks remain their high price, unsatisfactory recharging parameters requiring electrochemical sources of electricity, and the constraining conditions of the range and dynamics of these vehicles. It is well known that in order to achieve any success, properly educated people, financial expenses and time are needed. Larger financial outlays offer an opportunity to introduce the subject to a larger number of people and to accelerate the process. Unfortu-
nately, the published data show that since 1980 it is noted that in the most developed countries of the world, financial outlays are also rapidly declining in the area of scientific and energy research, indicating that time necessary to achieve success may be dangerously extended.

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