



HYPER-Q

A revolutionary innovative technology open the way to long-range power transfer

Project Summary

Hyper-Q is a direct extension of the preceding project "EVATRANS".

This first project was already a big success, we reached performances completely over the top level of the prior art, both in our simulations and using our prototypes.

At the same time, we discovered the major theoretical differences between our theoretical fundamentals and the MIT's one.

But, we completely missed some key points, like:

- A final theoretical and undisputable proof of our novel theory
- Our demonstrator was excellent, but its design was not optimized because of the lack of knowledge of the details of the model.
- The most problem was that we didn't had any simulation, measurement or any other source of sensitivities of the variables of the system.

In summary, we had a working technology, a good knowledge on its basic behavior, a theoretical proof of the basis of the mechanisms but a total absence of feeling of the details of the behavior of the various elements of the system.

At the end of this work, we have now the knowledge of the effect of each key element of the system on the global performances (validated by simulations and measurements) – we have the sensitivity curves of all the key parameters –

This opens the way to the writing first of a patent (already partially written), and then the publication of a detailed paper, based on the results of both projects.

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This project has been carried out by HEIG-VD/iAi in collaboration with hepia/CMEFE



Valorisation

Our Politics is the following:

First, we protect our innovation via a PCT patent, then we establish that the guidelines we have now in our hands are the direct way to what are really searching the peoples: a way to charge any small consumer device at a distance of more than 3m from the generator.

The key points we have to attract partners for new projects are (not extensive):

- Long range
- High efficiency
- "green": the transmitter radiates power only if a receiver is drawing this power
- Small: the receiver's antenna can be made small enough to cover any device from the mobile phone to the electrical car
- Harmless to human being, the frequencies are low enough to avoid any interaction with our body.

We have already been contacted by several companies that have a worldwide-sized market.

After more than 25 projects conducted in the HEIG-VD, this one is the first one that represents a real breakthrough at a worldwide level. The financial aspects are just too big to be understandable.

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