

# Localization of a harmonic source of the electricity distribution network



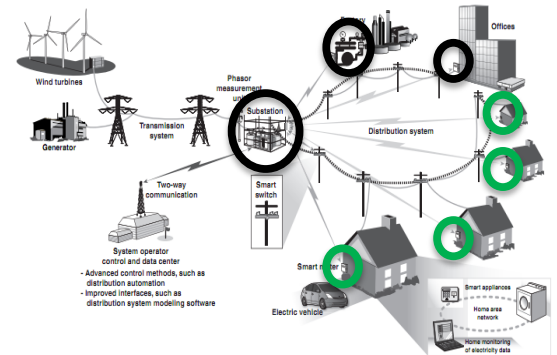
ENGINEERING  
ELECTRICITY DEVICE

## HARMONIC POLLUTION OF AN ELECTRICITY DISTRIBUTION NETWORK

### > Technology Solution

Measurement of currents and voltages (three-phase or mono-phased electrical network) :

- 1 | Development of an indicator that specifies whether the downstream part to the measurements is a source of harmonic pollution.
- 2 | Quantification of pollutant power (active and reactive) for each harmonic rank.
- 3 | Development of a real-time tools for the implementation of the indicators and the counting of polluting energy generated by the downstream part of the measuring point.



### Competitive Advantages

- Improve the quality of distributed electrical energy ;
- Better deployment of depollution solutions (active or passive filter) ;
- Implementable real-time tool in an electrical energy meter ;
- No additional physical sensor required.

### Development Status

- Proof of concept calculations;
- Development of a digital simulator;
- Development of a real time tool;
- Validation after a measurement campaign on an electrical distribution transformer.

### Business Opportunities

- Electrical smart meter (Linky like)
- Electrical testers
- HT/BT smart transformer

### #Keywords

Electrical network  
Harmonic pollution  
Real time count

### Research Team

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### Partnership

Licensing

### Intellectual Property

Patent : FR 1559507 (priority : 06.10.2015)



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