2.45 GHz MICROWAVE DISCHARGES FOR PLASMA PROCESSING

**Aura-Wave**
- Pressure range: $10^4$ mbar - a few $10^2$ mbar
- Plasma density: a few $10^{11}$ cm$^{-3}$ at 10 cm from the source in multisource configuration

**Hi-Wave**
- Pressure range: $10^2$ - a few $10^1$ mbar
- Plasma density: $10^{12}$ cm$^{-3}$ at 10 cm from the source in multisource configuration

Generation of radicals
- Etching
- PECVD
- Diamond deposition with **Hi-Wave**

Large scale processing
- Surface treatment (nitruration, cleaning)...
- Sterilization

NO IMPEDANCE TUNER REQUIRED WO 2012/146870
SAIREM patent consists of performing the impedance tuning, i.e. the minimization of the reflected power, using the variable frequency (VF) feature of the solid state generator. The automatic regulation of forward & reflected power via VF enables the automatic control of the transmitted power to the plasma.

COAXIAL PLASMA SOURCE SET-UP WITH 1 SOURCE

COAXIAL PLASMA SOURCE SET-UP WITH 4 SOURCES

SET-UP WITH 8 AURA-WAVE SOURCES

Your partner in Microwave & Radio-Frequency professional solutions