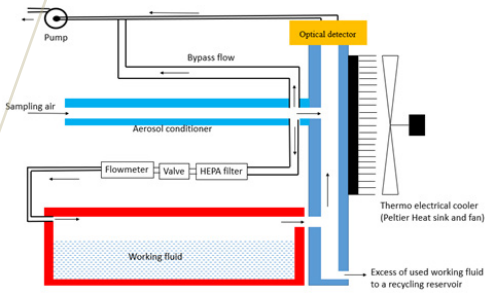
CONDENSATION NUCLEI COUNTER WITH HIGH DETECTION EFFICIENCY

Improved detection efficiency of condensation nuclei counters leading to the detection of particles smaller than 1 nm.

ERGANEO
L'AVENIR EST FAIT D'AUDACE

PRESENTATION

In a market where equipment is becoming more and more miniaturized and the standards for particle sizes in the air are more and more strict, it is necessary to find solutions to detect ever smaller particles.
The condensation particle counter according to the invention aims at shortening the path of the aerosol particles to be detected in the counter so as to reach a sub-nanometer detection limit and to shorten the response time of the counter thanks to flow decoupling, optimized particle injection and the presence of an independent reservoir.



Design of the new CPC

Condensation nucleus counter - Particle Counting
Sub-micron particle count detection - Heterogeneous condensation
Detection counting by particle magnification - Nano particle counter

APPLICATIONS

Air analysis and particle counting for the following sectors :

- Microelectronics (White Rooms)
- Nanomaterials industry
- Combustion of waste
- Engine emissions
- Pharmaceutical industry
- Bio-aerosol research laboratories

INTELLECTUAL PROPERTY

Number world application :
WO2020074732

PUBLICATIONS

In preparation

COMPETITIVE ADVANTAGES

- Lower response time
- Detection of particles below the nanometer range

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DEVELOPMENT PHASE

- ☑ TRL level 4, a functional prototype was produced in the laboratory