

IP MARKETPLACE

CONNECTING INNOVATION TO YOUR BUSINESS

TECH OFFER

A MULTIPHASE FLOW METERING SYSTEM FOR MEASURING CONSTITUENTS IN A FLUID MIXTURE



▶ MORE INFORMATION

MEGA-TREND

- **Chemicals and Materials**

TECHNOLOGY READINESS LEVEL (TRL)

- **TRL 3**

PATENT/ GRANTED NUMBER

- **PI 2017705111**

▶ TECHNOLOGY OVERVIEW

The present invention relates to a multiphase flow metering system and apparatus for measuring the relative volumetric proportions and temperature of constituents in a fluid mixture passing through a pipe. The apparatus includes a cylindrical cavity structure having a first microwave sensor system with a first loop antenna is coaxially placed around the pipe and a rectangular cavity structure having a second microwave sensor system with a second loop antenna is vertically placed across the pipe. The first and the second microwave sensor system, both placed external to the pipe,

transmits microwave signals at a first and a second predetermined resonant frequencies. A computer system analyzes the shifts in frequencies, based on the permittivity and temperature of the constituents, to identify the relative volumetric proportion of the constituents in real-time.

CONTACT US!

Dr. Lee Ching Shya

UMCIE Business Officer

Email: leecs@um.edu.my

Phone: +603 – 7967 7351 / 7352