

## Apparatus And Method For Measurement Of Flow Rate Of Cerebrospinal Fluid In A Conduit

### **Abstract:**

Apparatus and method for measurement of flow rate of cerebrospinal fluid in a conduit

The present invention illustrates an apparatus as well as a process for measurement of flow velocity of CSF in a conduit. The apparatus comprises a heating element mounted on the conduit, the heating element arranged for heating the CSF flowing through the conduit for generating bubbles. The apparatus further comprises a two optical sensing devices mounted sequentially on the conduit and downstream from the heating element. The first optical sensing device and the second optical sensing device are separated by a predetermined device interval. Both the first and the second optical sensing devices comprise an optical emitter and an optical detector. The apparatus further comprises a processing device coupled to the optical sensing devices, wherein the signals from the optical sensing devices are transmitted to the processing device for detection of bubbles, resulting in the detection of the flow velocity.