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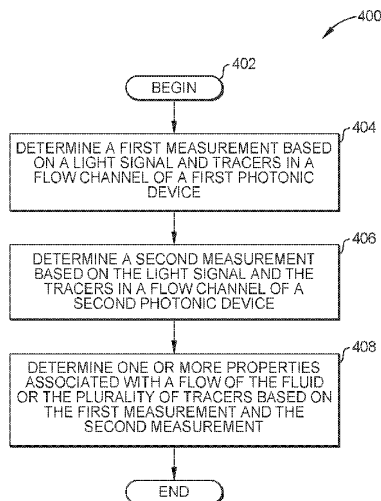


FIG. 4

(57) Abstract: Techniques for determining flow properties of a fluid in a fluidic device (102) comprising a light source (120A-120D,320) configured to generate a plurality of optical signals, tracers (110,310) suspended in a fluid, a plurality of photonic devices, each including a photonic element (306) and flow channel (104,106,108,208,308), and a measurement device (130A-130D,330) configured to: determine a first measurement based on the plurality of optical signals and the tracers (110,310) in a flow channel (104,106,108,208,308) of a first photonic device of the plurality of photonic devices, determine a second measurement based on the plurality of optical signals and the tracers (110,310) in a flow channel (104,106,108,208,308) of a second photonic device of the plurality of photonic devices, and determine a property associated with a flow of the fluid or the tracers (110,310) based on the first measurement and the second measurement.

WO 2022/017501 A1

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