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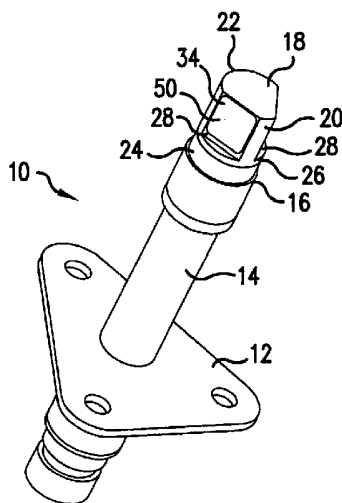
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- (71) **Applicant: HONEYWELL INTERNATIONAL INC.**  
[US/US]; 101 Columbia Road, P.O. Box 2245, Morristown, NJ 07960 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only): KORNIYENKO, Oleg** [CA/CA]; 515 Walkers Line Unit 22, Burlington, ON L7N 3V5 (CA). **PARK, Daesik** [CA/CA]; 5765 Long Valley Road, Mississauga, ON L5M 6W3 (CA). **CHANDU-LALL, David, V.** [CA/CA]; 23 Eleanor Cres., Georgetown, ON L7G 2T7 (CA).
- (74) **Agents: HOIRIIS, David et al.;** Honeywell International Inc., 101 Columbia Road, P.O. Box 2245, Morristown, NJ 07960 (US).
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(54) **Title: THERMAL MASS FLOW SENSOR**



(57) **Abstract:** A thermal mass flow sensor is disclosed that includes a housing (16) having a first sensor region and a second sensor region, a first thin film temperature sensor (39) formed at the first sensor region and a second thin film temperature sensor (58) formed at the second sensor region. A heating element (40) is arranged to heat the first temperature sensor (39) and a controller (46) is operably connected to the first temperature sensor (39), the second temperature sensor (58) and the heating element (40), and controls a power level to the heating element (40) to maintaining a temperature difference between the first temperature sensor (39) and the second temperature sensor (58). Said first temperature sensor is mounted at an angle of preferably 12 to 70 degrees to said second temperature sensor and preferably 6 to 35 degrees to the flow direction. A thin film temperature sensor and a method of using the thermal mass flow sensor are also disclosed.

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> G01F1/692    G01F1/684    G01F1/698		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) G01F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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*A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed		*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Roetsch, P

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