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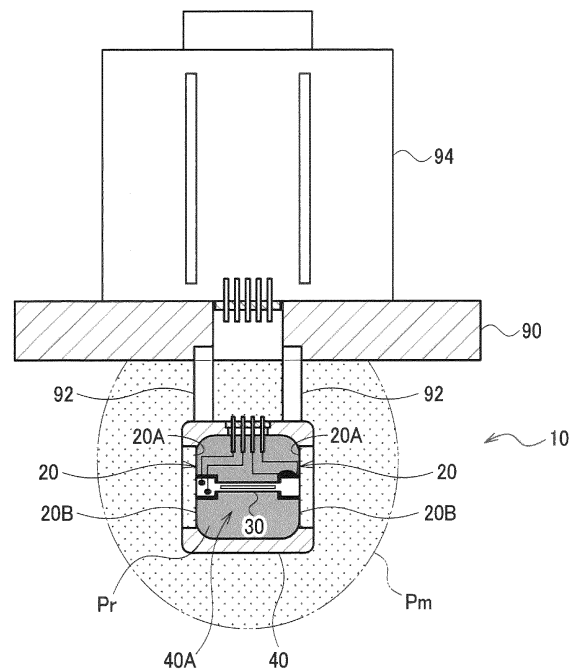
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(54) **DIAPHRAGM PRESSURE GAUGE AND COMPOUND PRESSURE GAUGE**

(57) A diaphragm pressure gauge 10 includes: a structure 40 disposed under pressure to be measured (P_m); two diaphragms 20 attached to the structure so as to oppose each other; and a detection element 30 that is fixed to the two diaphragms to detect displacements of the two diaphragms. In each of the two diaphragms, when one of two surfaces is designated an opposing surface and the other surface is designated a non-opposing surface, the structure and the two diaphragms set a space faced by one of the opposing surface and the non-opposing surface as an airtight space 40A to be kept in a reference vacuum (P_r), and the other of the opposing surface and the non-opposing surface is subjected to the pressure to be measured.

FIG. 1



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EUROPEAN SEARCH REPORT

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Y	* abstract * * paragraphs [0049], [0050] * * figures 1, 3 *	2-6, 8-10	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 2 October 2023	Examiner Grewe, Clemens F.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

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Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

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No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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see sheet B

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All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

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As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

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Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

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None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

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The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION
SHEET B

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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1. claims: 1-4, 7

- Invention 1 according to claims 1-4 and 7 solves the problem of how to provide a more compact pressure sensor,

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2. claim: 5

- Invention 2 according to claims 5 solves the problem of how to reduce the temperature influence on the pressure sensing,

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3. claim: 6

- Invention 3 according to claims 6 solves the problem of how to reduce the influence of fluid comprising particles on the pressure measurement,

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4. claims: 8-10

- Invention 4 according to claims 8-10 solves the problem of how to provide a compound pressure sensor.

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ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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