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(54) **Building having guarding means for guarding of air and flue gas**

(57) The present invention relates to a building provided with ventilation means and heating means, wherein the outlet of the ventilation means (2) and the outlet of the heating means (1) are connected to a shared out-

let (4) for air and/or flue gases, and wherein safety means are arranged close to one of the outlets and/or the shared outlet to prevent waste gases from the heating means flowing back into the building.

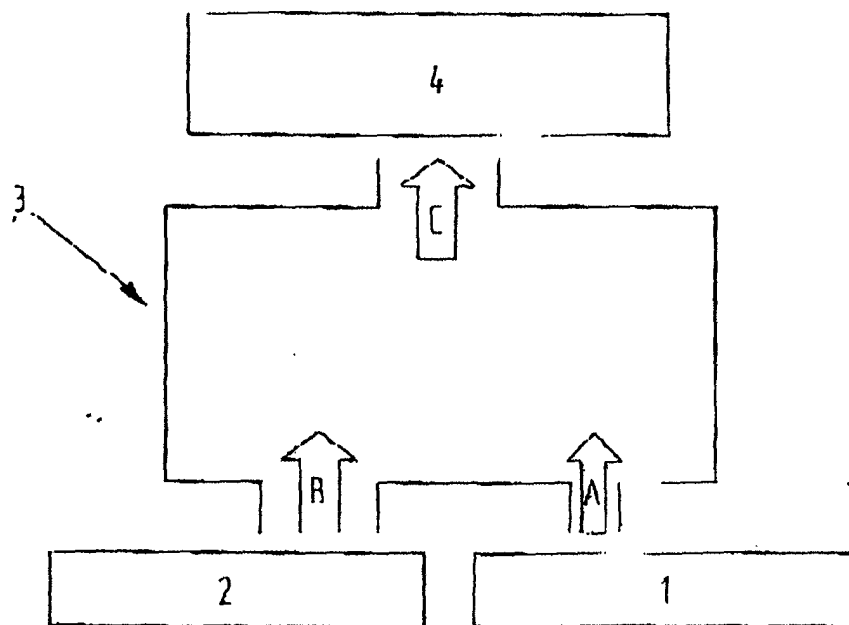


FIG. 1

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Description

[0001] Applicant has successfully marketed ventilation systems for many years, particularly for private homes. Owing to such systems the energy management of a modern house can be considerably better than that of older houses.

[0002] Houses are generally also provided with heating means, such as a central heating boiler or water heater, which are each provided with an outlet for flue gases.

[0003] The present invention has for its object to provide a shared outlet for flue gases and ventilating air wherein safety is ensured.

[0004] The present invention provides a building as according to claim 1.

[0005] In order to make the system completely fail-safe, one or more of the measures of the sub-claims are preferably applied.

[0006] The accompanying schematic view shows an outline of a setting in which the measures according to the present invention can be applied.

[0007] A flue gas outlet 1 of for instance a central heating boiler and a ventilation outlet 2 as indicated schematically with arrows A and B respectively are connected, via a device 3 which can also be provided in the manner stated in the claims with monitoring or safety means, to a shared outlet 4 for discharging gas flows A and B as according to arrow C.

[0008] So as to enable compliance with all possible safety regulations which can be envisaged, use is preferably made of one or more of the measures according to the appended claims.

let, wherein the pressure difference monitoring is preferably tested during a predetermined time period, for instance 24 hours.

- 5 4. Building as claimed in claim 1, 2 or 3, provided with a venturi with relatively low flow rate which is connected in parallel to the main flow in order to carry out the monitoring.
- 10 5. Building as claimed in any of the foregoing claims, wherein the monitoring means and safety means comprise a sensor for measuring the amount of CO₂ in the outlet of the ventilation means.
- 15 6. Building as claimed in any of the foregoing claims, provided with a pressure difference gauge, preferably a pitot tube for monitoring a positive gas flow in the direction of the shared outlet.
- 20 7. Building as claimed in claim 6, provided with a motorless draught-increasing means which is preferably monitored by means of a switchable electric generator.
- 25 8. Building as claimed in any of the foregoing claims, provided with a smoke detector in the outlet of the ventilation means.
- 30 9. Monitoring or safety means evidently intended for a building as claimed in one or more of the foregoing claims.

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Claims

1. Building provided with ventilation means and heating means, wherein the outlet of the ventilation means and the outlet of the heating means are connected to a shared outlet for air and/or flue gases, and wherein safety means are arranged close to one of the outlets and/or the shared outlet to prevent waste gases from the heating means flowing back into the building. 40 45
2. Building as claimed in claim 1, wherein the safety means comprise a non-return valve in the outlet of the ventilation means which is preferably provided with a reed contact which is preferably tested for correct operation once during a predetermined time period, for instance 24 hours. 50
3. Building as claimed in claim 1 or 2, wherein the safety means comprise a venturi with pressure difference monitoring for monitoring the through-flow via the outlet of the ventilation means and the outlet of the heating means in the direction of the shared out- 55

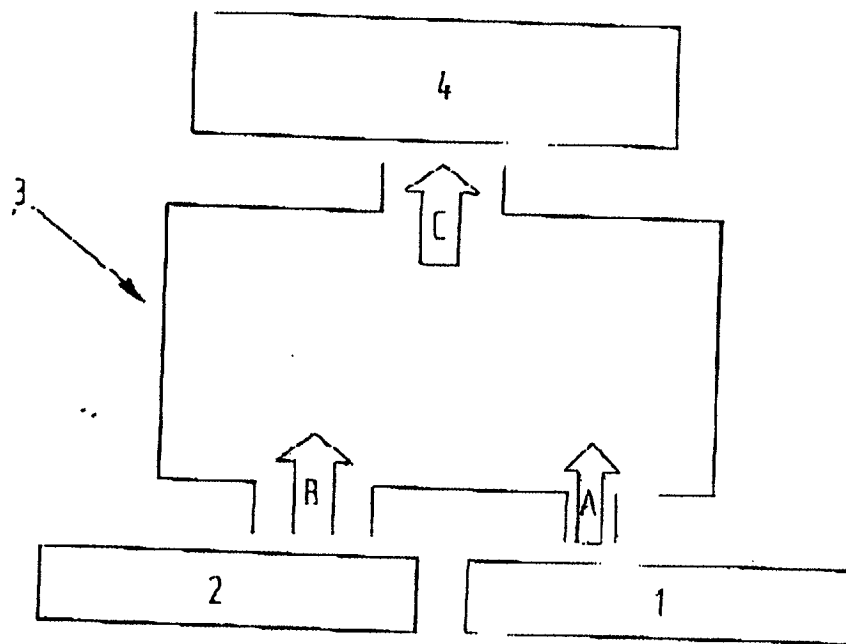


FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 02 07 8632

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The present search report has been drawn up for all claims			
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THE HAGUE		31 October 2002	Gonzalez-Granda, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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The members are as contained in the European Patent Office EDP file on
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