

(19)



(11)

**EP 2 679 743 A1**

(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:

**01.01.2014 Bulletin 2014/01**

(51) Int Cl.:

<i>E04F 19/04</i> <sup>(2006.01)</sup>	<i>G08B 17/10</i> <sup>(2006.01)</sup>
<i>G08B 17/12</i> <sup>(2006.01)</sup>	<i>G08B 21/20</i> <sup>(2006.01)</sup>
<i>G08B 21/22</i> <sup>(2006.01)</sup>	<i>G08B 21/12</i> <sup>(2006.01)</sup>
<i>G08B 3/00</i> <sup>(2006.01)</sup>	<i>F21S 9/02</i> <sup>(2006.01)</sup>
<i>F21V 23/04</i> <sup>(2006.01)</sup>	<i>H05B 37/02</i> <sup>(2006.01)</sup>

(21) Application number: **12173863.7**

(22) Date of filing: **27.06.2012**

(84) Designated Contracting States:

**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**

Designated Extension States:

**BA ME**

(72) Inventor: **Viale, Sébastien**

**6600 Bastogne (BE)**

(74) Representative: **Pronovem**

**Pronovem Luxembourg  
12, avenue du Rock n' Roll  
BP 327  
4004 Esch sur Alzette (LU)**

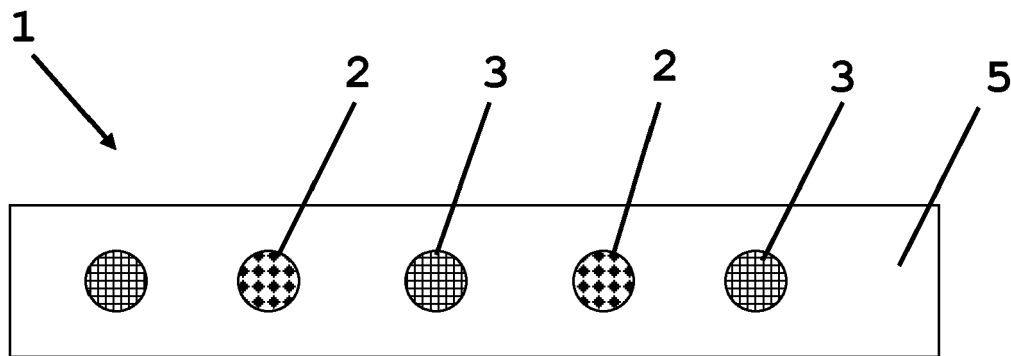
(71) Applicant: **Tarkett GDL**

**9779 Lentzweiler (LU)**

(54) **Skirting board**

(57) The present invention relates to a skirting board (1) comprising event detection means (2), power supply means (3) and communication means (4). Preferably, the skirting board is adapted to cover the joint between wall surface and floor covering and/or ceiling. Preferably,

the event detection means are adapted to detect traffic, fall, vibration, light, liquid leakage, moisture release, gas release, smoke release, fragrance release, nuclear release, chemical release, biological release, movement or sound.



**Fig. 1**

**EP 2 679 743 A1**

**Description****Field of the invention**

[0001] The present invention relates to a skirting board, or wall base, comprising event detection means.

**Prior art and related technical background**

[0002] A skirting board, also known as a baseboard, wall molding or a wall base, is generally a board covering the lowest part and/or the upper part of a wall, usually covering the joint between the wall surface and the floor and/or ceiling.

[0003] A skirting board generally covers the uneven edge of flooring next to the wall. It has an aesthetical purpose serving as a decorative molding, but installed between the wall surface and the floor it protects also the wall from kicks, abrasion, and furniture.

[0004] A skirting board is generally made of wood or plastic, and is nailed, screwed or glued to the wall.

[0005] However, skirting boards are usually simple panels having only aesthetical and wall protection purposes.

**Aims of the invention**

[0006] The present invention aims to provide a skirting board which does not have the drawbacks of the prior.

[0007] The present invention aims to provide a multi-function skirting board which is an alternative to traditional skirting boards.

[0008] The invention aims to provide a multifunction skirting incorporating detection means, power supply and communication means.

[0009] The present invention aims to provide a solution to cabling and cable connections issues.

**Summary of the invention**

[0010] The present invention discloses a skirting board comprising event detection means, power supply means and communication means.

[0011] According to particular embodiments, the skirting board may comprise one, or a suitable combination of one or several, of the following characteristics:

- the power supply means are autonomous power supply,
- the autonomous power supply comprise at least one photovoltaic cell and at least one battery,
- the event detection means comprises an ultrasonic detector, a passive infrared detector or a combination thereof,
- the event detection means comprises a gas detector, a multiple gas detector, a smoke detector, a liquid detector, an audio detector or a combination thereof,
- the communication means comprise means to pro-

duce audible and/or visual alarms,

- the communication means are wireless means,
- the skirting board comprises data interpretation means and/or data storage means,
- the skirting board comprises cooling means,
- the skirting board comprises coupling means enable to couple adjacent skirting boards and/or means to fix said skirting board to the wall and/or to the floor or ceiling.

[0012] The present invention discloses also the use of the skirting board according to the invention to detect traffic, a fall, a liquid leakage, moisture release, gas release, smoke release, fragrance release, nuclear, chemical or biological (NBC) release, movement or sound into a wall, a floor and/or a ceiling

[0013] The present invention discloses also a skirting system comprising at least one skirting board according to the invention.

[0014] The present invention discloses also the use of the skirting system according to the invention to cover the lowest and/or the upper part of the wall of a construction.

**Brief description of the drawings**

[0015] Figure 1 represents schematically the front face of the skirting board.

[0016] Figure 2 represents schematically the inside of the skirting board.

**Detailed description of the invention**

[0017] The present invention relates to a skirting board 1 able to detect at least one event, preferably a plurality of events of the same or different nature. The skirting board 1 is thus multifunctional.

[0018] The skirting board 1 comprises detection means 2, power supply means 3 and communication means 4. All the means are embedded in the skirting board body 5.

[0019] The detection means 2 comprise at least one detector preferably a plurality of detectors, able to detect any suitable event.

[0020] The detectable event may occur near the floor, the wall, the ceiling and/or within the space covered by the detector or detectors, but also on the surface or within the floor, the wall and/or the ceiling.

[0021] As for example, the event detectable can be a traffic, a fall, a vibration, a light, lights, a liquid leakage, moisture release, gas release, smoke release, fragrance release, nuclear, chemical or biological (NBC) release, movement or sound into the wall, the floor and/or the ceiling.

[0022] The event can be an horizontal and/or vertical movement of a body of an object, an animal or a person, for example a person which is moving or falling in the space covered by the detector, or detectors, embedded

in the skirting board.

**[0023]** The event can be the leakage of water or oil for example, onto or from the wall, the ceiling and/or the floor.

**[0024]** The event can be the release of moisture coming from the wall, the floor and/or the ceiling.

**[0025]** The event can be the release of at least one gas coming from the wall, the floor and/or the ceiling. The gas may be for example butane or propane, carbon dioxide, carbon monoxide and/or exhaust fumes.

**[0026]** The event can be the release of smoke from the combustion, or pyrolysis, of a material, for example of a furniture during a fire.

**[0027]** The event can be the release of nuclear, chemical and/or biological particles or components. For example, the event may be the release of volatile organic compounds (VOCs) from PVC floorings.

**[0028]** The event can be the movement or sound coming from the wall, the floor and/or the ceiling, for example the sound produced by termites, rats or mice.

**[0029]** In a preferred embodiment, the detector may be for example an ultrasonic detector, a passive infrared detector or a combination thereof.

**[0030]** In a preferred embodiment, the detector may be for example a gas detector, a multiple gas detector, a smoke detector, a liquid detector, an audio detector or a combination thereof.

**[0031]** The power supply means 3 comprise a power supply coupled to the electric network of the place wherein the skirting board is installed. In this case, the skirting board 1 may also comprise the electric cables.

**[0032]** In a preferred embodiment, the power supply means 3 comprise autonomous power supply. Preferably, the power supply means 3 comprise at least one photovoltaic cell 6, preferably a plurality of photovoltaic cells, and/or at least one battery, more preferably a plurality of batteries.

**[0033]** The communication means 4 are means to communicate that an event, or a plurality of events, detected by detection means, occurred. The communication means 4 may be either by wire or wireless.

**[0034]** In a preferred embodiment, the communication means 4 comprise means to produce an audible and/or visual alarm, preferably audible and visual alarms. The communication means 4 may comprise a speaker, or a plurality of speakers, to produce a sound or a plurality of sounds, music, and/or a light or lights, of a single colour or multiple colours, which may also be flashing.

**[0035]** In another preferred embodiment, the communication means 4 comprise wireless communication means.

**[0036]** The wireless communication means may comprise Wi-Fi means, RFID means, Bluetooth means, mobile phone means and/or access to internet means.

**[0037]** The wireless communication means may enable the skirting board to communicate to a computer.

**[0038]** In a preferred embodiment, the communication means 4 comprise wireless communication means in combination with means to produce audible and/or visual

alarm.

**[0039]** The skirting board 1 may further comprises data interpretation means 7 and/or data storage means.

**[0040]** The data interpretation means 7 may comprise a central processing unit, memory means, for example, ROM or RAM.

**[0041]** The data interpretation means 7 interpret the event, or plurality of events, detected by the detection means. For example, for an event "falling", it can discriminate between the fall of a person and a dog, a child or a bag, being simply laid on the floor.

**[0042]** The skirting board 1 may further comprises cooling means.

**[0043]** The cooling means may be either air-conditioning means or means to cool the different means embedded within the skirting board.

**[0044]** The skirting board 1 may further comprises coupling means enable to couple adjacent skirting boards according to the invention and/or means to fix the skirting board to the wall and/or to the floor or ceiling.

**[0045]** The skirting board 1 according to the invention is made of wood or plastic, preferably, it is made of PVC or rubber.

**[0046]** The skirting board 1 according to the invention has any suitable shape and dimension.

**[0047]** The skirting board 1 according to the invention present the advantage of being easy to install discreetly and fully integrated in the wall.

**[0048]** The skirting system comprises at least one skirting board 1 according to the invention, preferably a plurality of skirting boards 1 according to the invention. In this last embodiment the skirting system may comprises at least one skirting board, preferably a preferably a plurality of skirting boards being simple boards, or panels, not multifunctional boards, for example made of wood or plastic, without any electronic embedded therein. However, the skirting system may also comprise a board which is no multifunctional but comprises the electric cables from the power supply means.

**[0049]** The skirting system may be used to cover the lowest and/or the upper part of a wall.

**[0050]** In a preferred embodiment, the wall comprising the skirting system according to the invention is an inside wall of a construction, preferably a building.

**[0051]** In another preferred embodiment, the wall comprising the skirting system according to the invention is an outside wall of a construction, preferably a building.

## 50 Claims

1. A skirting board (1) comprising event detection means (2), power supply means (3) and communication means (4).

2. The skirting board (1) according to claim 1, wherein the power supply means (3) are autonomous.

3. The skirting board according to claim 2, wherein the autonomous power supply (3) comprise at least one photovoltaic cell (6) and at least one battery.
4. The skirting board (1) according to any of the preceding claims, wherein the event detection means (2) comprises an ultrasonic detector, a passive infrared detector or a combination thereof. 5
5. The skirting board according to any of the preceding claims, wherein the event detection means comprises a gas detector, a multiple gas detector, a smoke detector, a liquid detector, an audio detector or a combination thereof. 10
6. The skirting board (1) according to any of the preceding claims, wherein the communication means (4) comprise means to produce audible and/or visual alarms. 15
7. The skirting board (1) according to any of the preceding claims, wherein the communication means (4) are wireless means. 20
8. The skirting board (1) according to any of the preceding claims comprises data interpretation means (7) and/or data storage means. 25
9. The skirting board (1) according to any of the preceding claims comprises cooling means. 30
10. The skirting board (1) according to any of the preceding claims comprises coupling means enable to couple adjacent skirting boards and/or means to fix said skirting board to the wall and/or to the floor or ceiling. 35
11. Use of the skirting board (1) according to any of the claims 1 to 10, to detect traffic, a fall, a vibration, a light, lights, a liquid leakage, moisture release, gas release, smoke release, fragrance release, nuclear, chemical or biological (NBC) release, movement or sound into a wall, a floor and/or a ceiling. 40
12. A skirting system comprising at least one skirting board (1) according to the claims 1 to 10. 45
13. Use of the skirting system according to claim 12 to cover the lowest and/or the upper part of the wall of a construction. 50

55

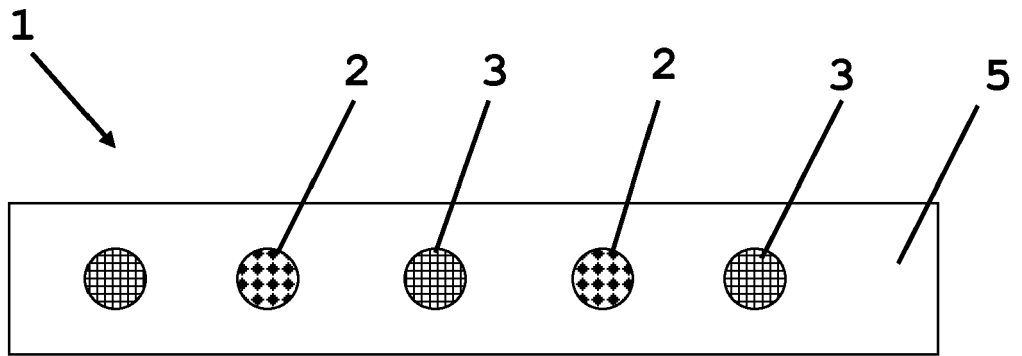


Fig. 1

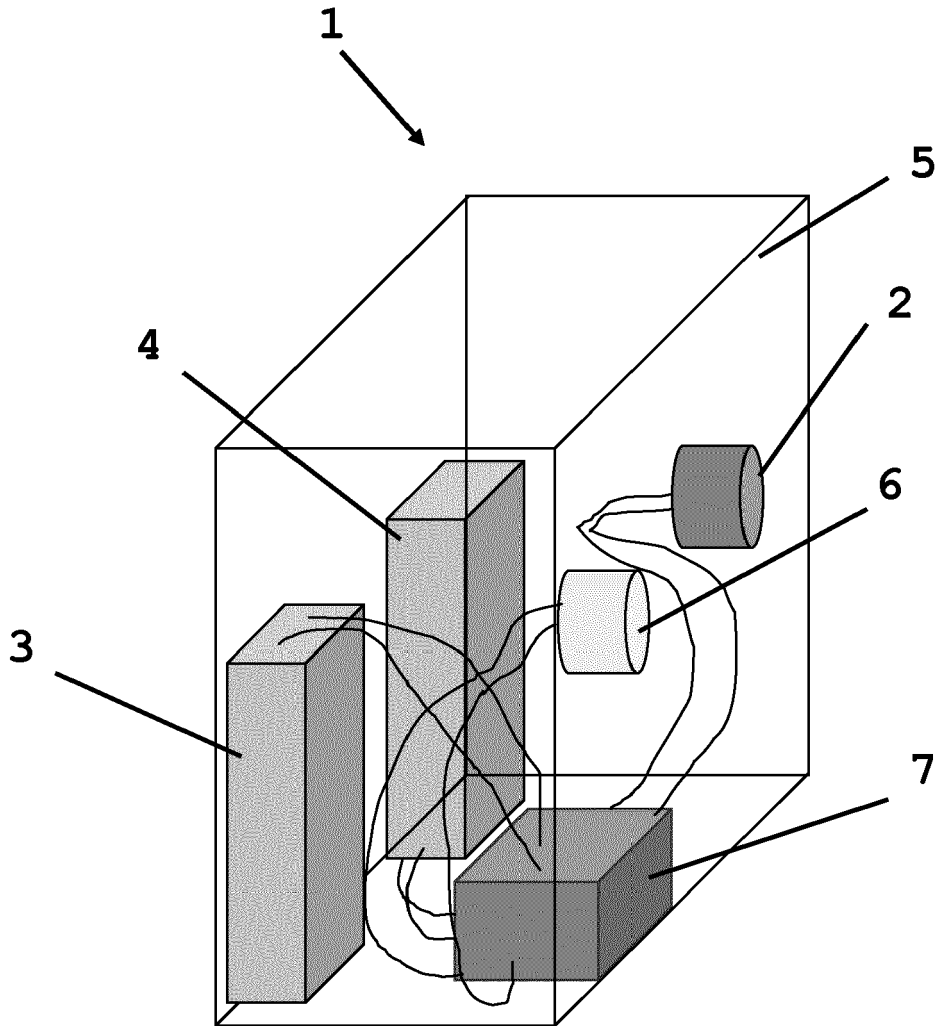


Fig. 2



EUROPEAN SEARCH REPORT

Application Number  
EP 12 17 3863

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 7 142 123 B1 (KATES LAWRENCE [US]) 28 November 2006 (2006-11-28) * figures 18,19 *	1-3,5-13	INV. E04F19/04 G08B17/10 G08B17/12
X	GB 2 455 723 A (JANINA INTERNAT LTD [GB]) 24 June 2009 (2009-06-24) * the whole document *	1,2,4-7, 10-13	G08B21/20 G08B21/22 G08B21/12 G08B3/00
X	WO 2008/093261 A2 (PHILIPS INTELLECTUAL PROPERTY [DE]; KONINKL PHILIPS ELECTRONICS NV [NL]) 7 August 2008 (2008-08-07) * claim 2; figure 5 *	1,8, 10-13	F21S9/02 F21V23/04 H05B37/02
A	BE 1 012 718 A7 (SCHOLAERS LAURENT [BE]) 6 February 2001 (2001-02-06) * page 1, line 3, paragraph 3 *	1,11-13	
			TECHNICAL FIELDS SEARCHED (IPC)
			F21V H05B F21S E04F G08B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 14 November 2012	Examiner Bouyssy, Vincent
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	

1  
EPO FORM 1503 03.02 (P04C01)

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

EP 12 17 3863

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  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-11-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7142123 B1	28-11-2006	AU 2006295286 A1	05-04-2007
		CA 2623255 A1	05-04-2007
		CN 101292154 A	22-10-2008
		EP 1934588 A1	25-06-2008
		JP 2009509164 A	05-03-2009
		KR 20080053507 A	13-06-2008
		US 7142123 B1	28-11-2006
		US 2007139208 A1	21-06-2007
		US 2009153336 A1	18-06-2009
		US 2011093217 A1	21-04-2011
		WO 2007037830 A1	05-04-2007
-----			
GB 2455723 A	24-06-2009	NONE	
-----			
WO 2008093261 A2	07-08-2008	JP 2010517236 A	20-05-2010
		TW 200907244 A	16-02-2009
		WO 2008093261 A2	07-08-2008
-----			
BE 1012718 A7	06-02-2001	NONE	
-----			

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82