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(54) **NASAL ALAR PHOTOPLETHYSMOGRAPHY PROBE HOUSING**

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(**) Term: **15 Years**

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(52) **U.S. Cl.**
USPC **D24/187**

(58) **Field of Classification Search**
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CPC A61F 5/56; A61M 2210/0618; A61M 2230/005; A61M 2230/20; A61M 2230/432; A61M 2230/42; A61M 16/066; A61M 16/0672; A61M 16/20; A61B 5/0205; A61B 5/0295; A61B 5/02416; A61B 5/0261; A61B 5/0878; A61B 5/4452; A61B 5/6819; A61B 5/087; A61B 5/021; A62B 23/025; A62B 23/02; A62B 18/025; A62B 18/10; A62B 18/02; A41D 13/11; G01N 33/497
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,064,986	A *	12/1936	Mezz	A62B 9/06
				128/201.18
4,457,756	A *	7/1984	Kern	A61B 17/12022
				424/434
D375,552	S *	11/1996	Davi	D24/106
5,810,724	A	9/1998	Gronvall	
6,561,184	B2 *	5/2003	Chiang	A63B 33/00
				128/201.18
7,024,235	B2	4/2006	Melker et al.	
D546,464	S *	7/2007	Savoia	D24/200
D615,209	S *	5/2010	Minogue	D24/200
D616,559	S *	5/2010	Boyer	D24/106
D623,306	S *	9/2010	Boyer	D24/106
D670,396	S *	11/2012	Doogan	D24/200

(Continued)

OTHER PUBLICATIONS

Nasal Sensor, Nasal Alar SpO2 Sensor, posted at Xhale.com, posting date not given, © 2015, site visited on Oct. 5, 2016, <<http://xhale.com/assurance/sensor/>>.*

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(57) **CLAIM**

The ornamental design for a nasal alar photoplethysmography probe housing, as shown and described.

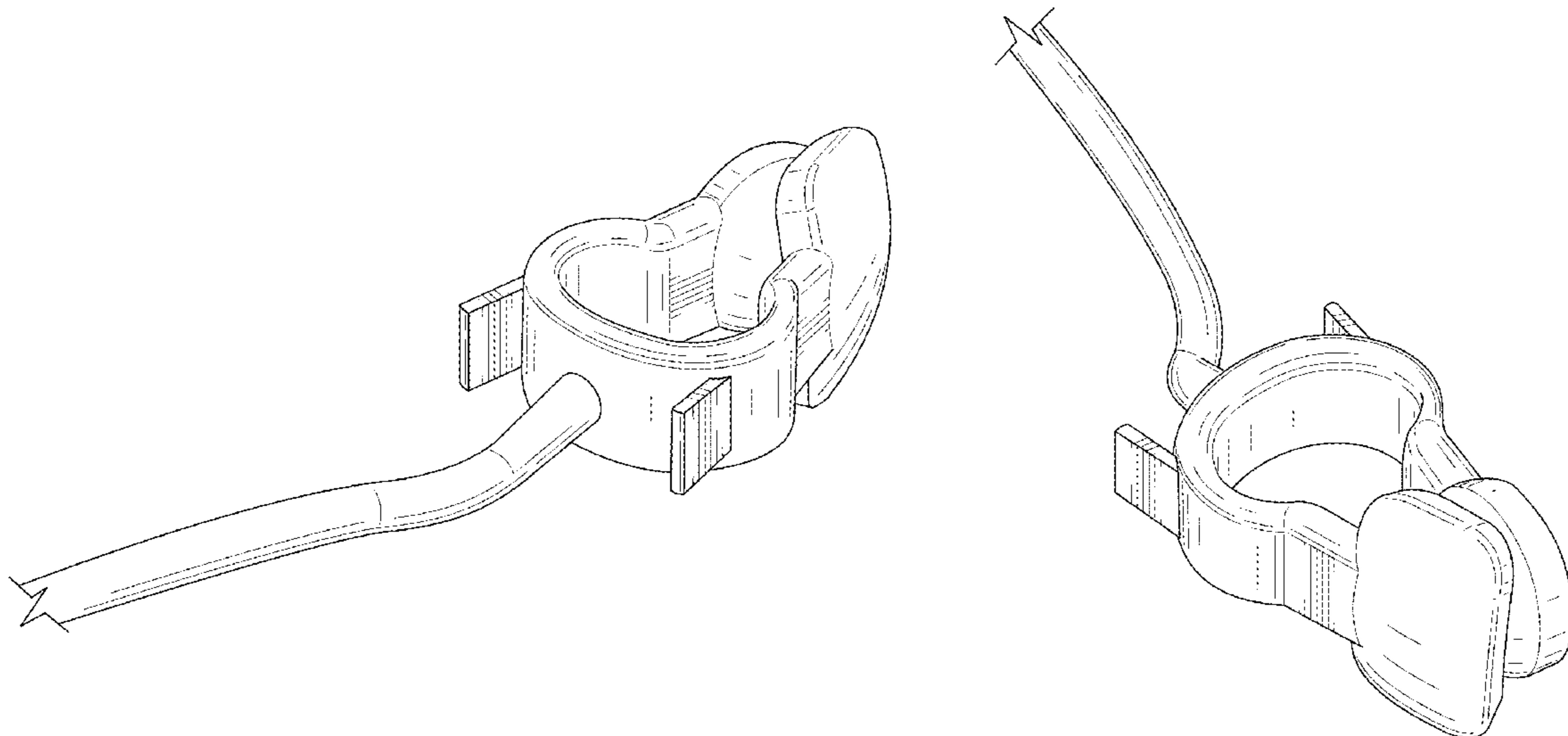
DESCRIPTION

FIG. 1 is a right side perspective view of the nasal alar photoplethysmography probe housing showing our design; and,

FIG. 2 is a left side perspective view thereof.

The claimed photoplethysmography sensor housing is used to house a photoplethysmography sensor to monitor physiological signals derivable at the nasal alar of a subject and has applications in medicine.

1 Claim, 1 Drawing Sheet



(56)

References Cited

U.S. PATENT DOCUMENTS

8,376,752 B2 *	2/2013	McDevitt	A61F 5/08 434/262
D739,519 S *	9/2015	Davi	D24/106
D745,166 S *	12/2015	Chang	D10/78
D748,274 S *	1/2016	Rich	D24/164
2012/0078069 A1 *	3/2012	Melker	A61B 5/0836 600/340
2014/0005557 A1	1/2014	Rich et al.	
2014/0243631 A1 *	8/2014	Melker	A61B 5/6819 600/324
2014/0275930 A1	9/2014	Rich et al.	

OTHER PUBLICATIONS

Nasal Sensor, Nasal Alar SpO2 Sensor, posted at YouTube.com, Jul. 30, 2015, site visited Oct. 5, 2016, <<https://www.youtube.com/watch?v=ItNqi4dBIHg&feature=youtu.be>>.*

Nasal Sensor, Alar Nasal Oximetry Sensor, posted at YouTube.com, Aug. 11, 2015, site visited Oct. 5, 2016, <<https://www.youtube.com/watch?v=EiNXL7ITFv8>>.*

Nasal Placement, Xhale Nasal Placement Video, posted at YouTube.com, Mar. 21, 2016, site visited Oct. 5, 2016, <<https://www.youtube.com/watch?v=LqP85yR00Tc&feature=youtu.be>>.*

* cited by examiner

