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(22) 2004 07 20

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WO 2003/061465

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(87)

2003 07 31

(30) 60/350,840 2002 01 22 (US)

(71) , . 1701 (: 33301)

, , . 310 (:60047)

, , . 180 (:02061)

, 1816 (:33327)

(72) , 33301 1701

, 33316 11 1200

, 33331 16732

, 01720 , 21

, , 01720 28

, , . 60047 310

, , . 02061 180

, 33327 1816

, 33305 2100 904

(74)

(54) ECG

(ECG)

1

(cardiac monitoring system) (ECG) (electrocardiograph)
; ECG (telemetry) (ECG) (monitoring station)

(ECG)

ECG

(raw)

ECG

ECG

ed) ECG

ECG

ECG

(hardwir

(drop antenna)

가

(retrofit)

(proprietary)

ECG

ECG

가

ECG

ECG

가

ECG

(chest assembly)

(repeater)

(overlapping zone)

가

(cell pattern coverage)

- 1 ECG ;
- 2 ;
- 3 ;
- 4 ;
- 5 ;
- 6 ;
- 7 ;
- 7a ;
- 8 ;
- 9a ;
- 9b ;
- 10 ;
- 11 ;
- 11a ;
- 12 ;
- 13 ;
- 14 ECG ;
- 15 .

EGC (14) EGC (16) 1 ECG (10) (12),
 (12) (18) 3 (20)
 18a, 18b, 18c, 18d, 18e (18) (snap terminal) (20)
 가 (18) (21)
 (12)
 2 (12) DuPont Sontara (fabric) 가
 (22, 24) (26, 28) (22, 24)
 (30, 32) (30, 32) Mylar()
 (34, 36) (38) (30, 32) (38)
 1 (40) 2 (42) 가 Mylar (18)
 (38) 1 (40) (39)
 (12) (44) (44)
 (38) 2 (42) (12) 가 가 ECG
 (18) Mylar X-

1 (12) 5 (20) (18)
 (12)가 (20) 7
 V (12) RA 가 1 (18a, 18b, 18c, 18d, 18e) RL, LA, LL, RA
 가 (12) , LA 가 2 (intercostal)
 , RL LL 가 1 2 가 , V
 (12) 4 5 (clavicle) 가 (torso)

3 (12) (12) 3
 (12) 가 (21) (12) (tail, 46)
 1 (46) (46)가 (46a) (46a)
 (46) 가 (electrode retaining section, 47) (47) (ar
 cuate) (48) 1 가 (50) (48) . RA 1 가
 (50) (48) (52) . LA (52)
 가 (52) (linear run, 54) . RL (54) 2
 (56) (extension arm, 58) (54) . V (58)
 , LL 2 가 (56)

가 (50, 56) S (serpentine) (die cutting) 가 (50, 56)
 (Kapton), Mylar, (memoryless)
 가 (50, 56) S 가 (folded)
 가 (50, 56) (12)가 가 (58) (V
 1, V2 V3) 가 가 V 가 (58)
 (58) (58) (12) (58)
 (58) (58) (58) (54) (perforate
 d seam) 가 (58) (58)

(92) , , , (21, 66) (88, 90) 가
 (21, 66) (21, 66) (88, 90)
 (94) (21, 66) (88, 90) (94) 가 .
 (88, 90) (21, 66) (secure fit) 가 (21, 66)
 가 (14)
 (21, 66) , , 가 , 가, (21, 66) (21,
 66) (88, 90) (rib, 96) . 가 (21, 66) (21,
 (21) (21)가 (88) (14)
 (98) 가 , (sleep mode
)' (14) (88) (88) (on-body) (14)
 (98) (12) (wearables) (14)
 (14) (14) (14)
 (12) (98) .
 ABS (14) (casing) - - (acrylonitrile-butadiene-styrene;
 , 가 (14) (14)
 가 , 1 (14) (14) (100)
 (100) (14) (100) Velcro 가 (strap) 7 ,
 (14) (102) (104) (102) (102)
 (14) (16) (14) (104)가
 (104)가 (12) (14) (14)
 (16) (102) (14)
 , LED, LCD, , 가 7a (102)
 (14) (100) 가 가 . (102)
 (104) (14) (106) (104)
 - 가 가 (104) (106) (14) (104) 3.6V
 가 (100)
 (14) (14) (12) (60) ECG
 (14) (108) 7 3kbps (12) (60) ECG
 , (14) RL, RA, LL, LA V (12))
 (12) (12) RL, RA, LL LA (60)가) '12 '(,
 (12) RL, RA, LL LA (60) V1 V6 (14)
 , EEG (60) ,
 (14) (14) (16)
 8 , (108) ASIC, (112), (114),
 - (ADC, 116), (118), (120) 가 ,
 (14) (12) (60) 10
 9 (112) (112) (122), (124), (126),
 (128) (130) (112) (122) (112)
 (12) (60) , (88)

(90) (124) (128) (130)
 (126) (out-of-band) 9 (differential error)가 ECG
 (114) (112) ADC(116)
 (decimate) (118) (DSP) (120)
 (118) ECG (16) ECG (1)
 18) (pacemaker) (118) (pacemaker) (118) EEG
 (integrity) 가 ECG
 (lead off) 가 ECG
 (14) 가 ECG (heart ve
 ctor) CG (10) 가 ECG 가 ECG ECG (10) 가 E E
 CG (in-series) ECG ECG (20)
 가 ECG 가 ECG (difference), (differential)
 가 ECG 가 ECG ECG 가 (anti-al
 iasing)(Nyquist) 가 ECG 가 (differing group delay performance) 가
 , 1200Hz ECG 3000Hz (over sampled). , 0.05Hz 150Hz /
 가 (decimated) (118) 8 (decima
 tion) 가 1 (16) (14) Bluetooth
 IEEE 802.11b 가 (14) (16) (14) (16)
 (16) (16) 9a (token key, 132)가 (14) (14)
 6) (134) (134) (133) 가 9b (14) (13)
 (134) (14) (136) (132) (14)
 (132) (16) (132) (14)

(14) (16) (132) (14) (16) (134)
 (14) (16) (132) (14) (16) (132)
 (16) (132) (14) (132) (16) (132)
 (132)가 (14) (16) (14) (16)
 7 (102) (14) (132) (16)
 (14) 가 (14) 가
 ECG (14) (132)
 (14) (16) (14) (16) (132)가 (16)
 (134) ((14) (16) (136))
 (132)가 (16) (16) (1
 4) (16) (132)가 (16)
 (14)
 (16) (ABS) 가
 (16) Velcro, (dual-lock strip), (double-sided foam ta
 ECG (138) 가 (16)
 ECG (138) 가 가 10 (16)
 (16) (14) 가 (14)
 (cradle, 140) (16) 가 (16) (144)가 가 (14)
 (142) (16) 가 (16) AC (wall power inlet)
 (144) (16) (16) AC (144) (16)
 (144)가 (142) (146) AC (144)
 (16) / (144) (144) 3.6V 가 가
 가 (14) (144) (104)가 가 10
 4)가 (144) (16) (16) '7 '12
 가 (lead switch, 150)
 11 (16) (152) (152) (14) (16)
 (144)가 (144)가 (16) (16)
 (14) (16) (144)가 (102)가
 LED, LCD, (102) 11a (152)
 가 (radio functionality)
 (16) (154) (14) (16) 12
 (154) (156), (158), (DAC, 160),
 (162), (166) (156) (156)
 (158) (156) 가
 (14) (108)
 , ECG
 (118) 3kHz

(reconstruction filter) 150Hz (group delay) (162) (108) (166) Bluetooth

C(160) (specification) 가 (164) (166) (108) (166) Bluetooth

(154) (12) (60) 10 9 (172)

(166) (168) (166) 가 (166) (168), (170), (118) DAC

(172) DAC (172) (14) (unity system g

ain) ECG (unity system g

(16) ECG (174) ECG (138) ECG

(174) (16) (176) 가 (16) (174)

(16) 10 (176) (176) (174)

) (174) 5 (176) RL, LA, LL, RA V/V1

(16) (174) 5 (176) V2, V3, V4, V5 V6

. ECG '7' (, (12))

(174) (16) 5 (176) . ECG '12' (,

(176) (12) (60) 가) (176) (174)

(176) 6 (16) (176) 4 (176)

14 ECG (198)

(200) (12) / (60)

(21, 62) (14) (204) (14) (12) / (60)

) (132) (16) (132) (16) (16) (13)

2) (132) (14) (132) (16) (14)

(132) (132) (14) (132) (16) (132) 가

(14) (132) (16) (132) (16) (132)

(12) (60) (208) (210) (14)

(16) (214) (16) (212) (16) (174) ECG (138)

(216) , ECG (138) (138)

(14) (218) (218) 18 (218) 18

가 (14) (218) , Bluetooth, IEEE 802.11b, WiFi LAN

(14) (218) (218) (14) (tag) (14)

(14) (218) (14)

4) (218) 가 (14) (14) (1)

switch over)' (218) (14) (218)

(218) (218) 100 가 , (outlet)

(wall mounted) (218) 가

(218) (218) (14) (218) (bundle),

(14) (220) LAN

(218) Bluetooth, IEEE 802.11b, WiFi, (220)

(220) /

6) (16) (inter alia), (16) 가 가 (16) (1) (decompressor) 가 , A/C 가 가 (218) (218)

(unbundle). A/D (218)

6) (220) (14) (1) (16) (220) / (220) /

(222) () (222)

(222) (220) (14) (218) (16), (222)

224) (218) (218) (224) (224) (222) (222) (LAN (

(57)

1.

가

;

;

2.

1

가

3.

1 ,

Bluetooth

4.

1 ,

Bluetooth

5.

1 ,

6.

1 ,

(tagging)

7.

1 ,

가 , 가
(switch over)

8.

1 ,

가 ;
;
가

9.

8 ,

1 2 ;
1 ;
2 가

10.

1 ,

11.
1 ,

12.
1 ,

13.
1 ,

가

14.

,
가 ,

;

;

,

15.
14 ,

가

16.
14 ,

Bluetooth

17.
14 ,

Bluetooth

18.
14 ,

19.

14 ,

14 **20.**
14 ,

가 ,
가 .

14 **21.**
14 ,

14 **22.**
14 ,

14 **23.**
14 ,

가 ;
;
가

23 **24.**
23 ,

1 2 ;
1 ;
2 가 .

14 **25.**
14 ,

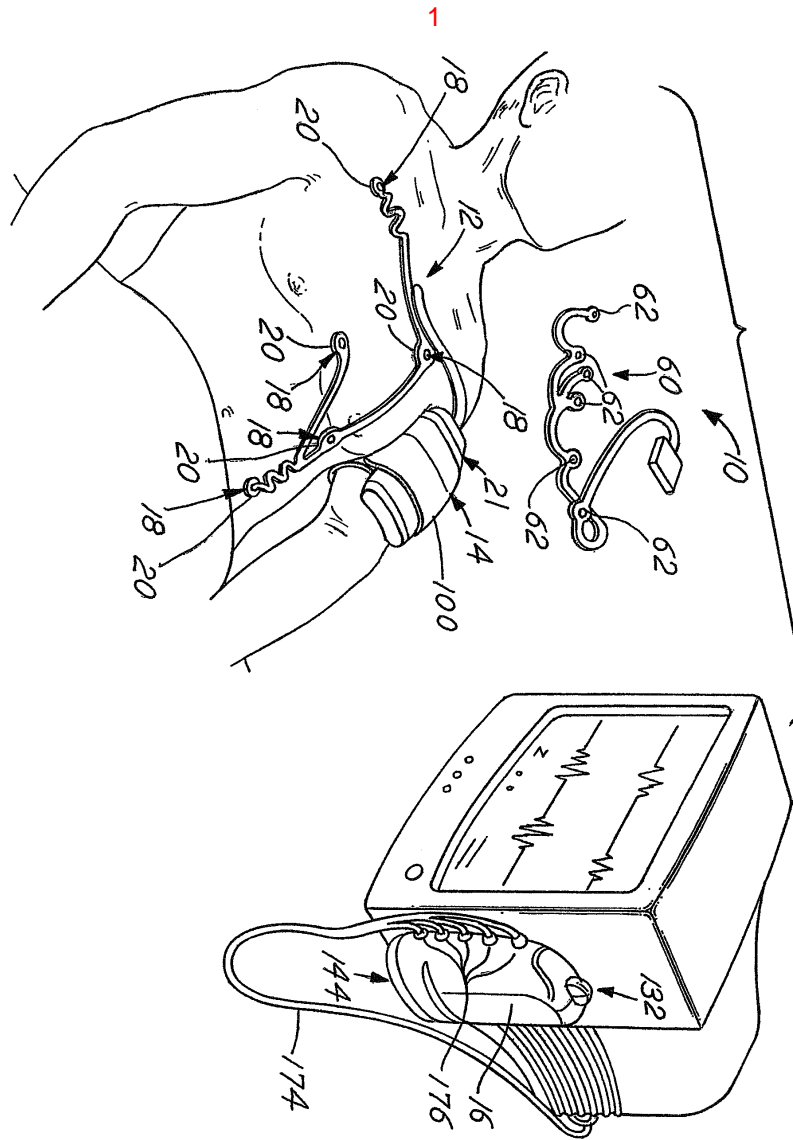
14 **26.**
14 ,

가

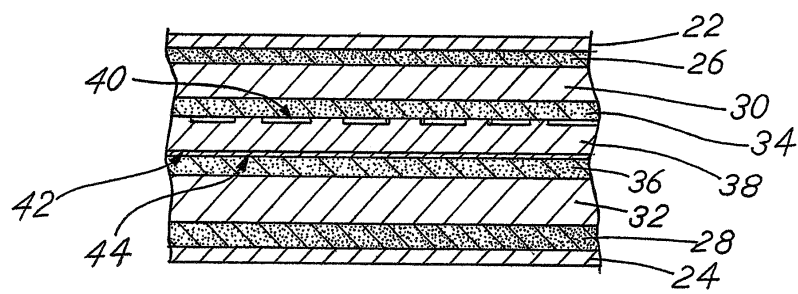
27.

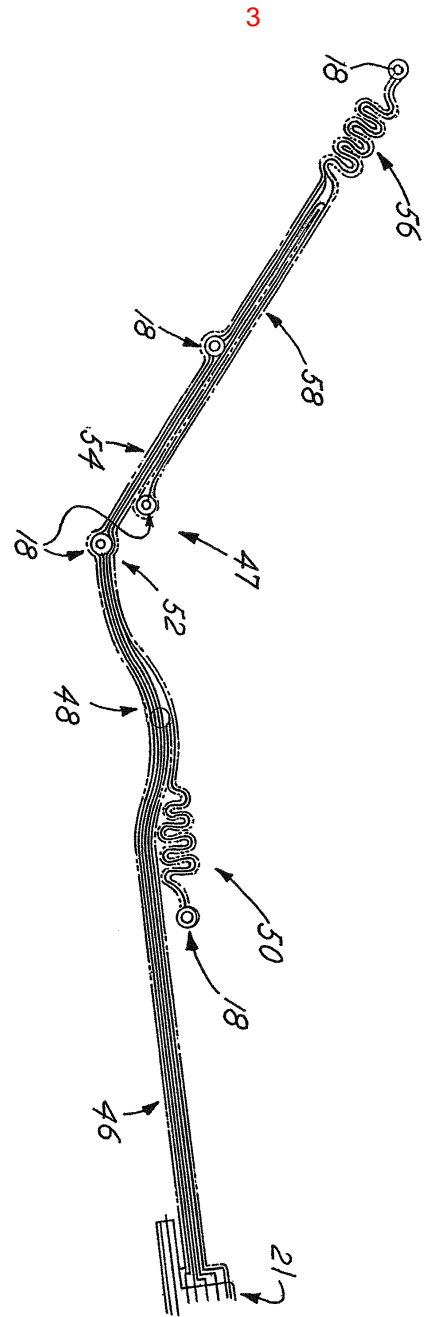
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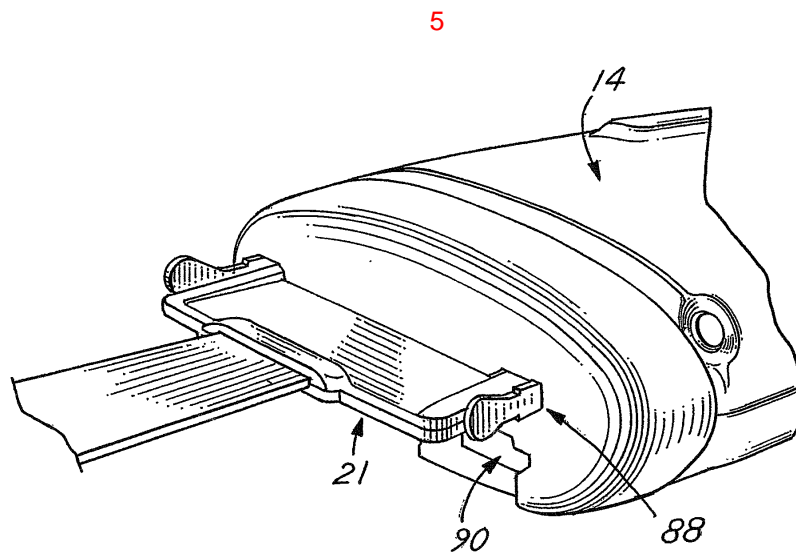
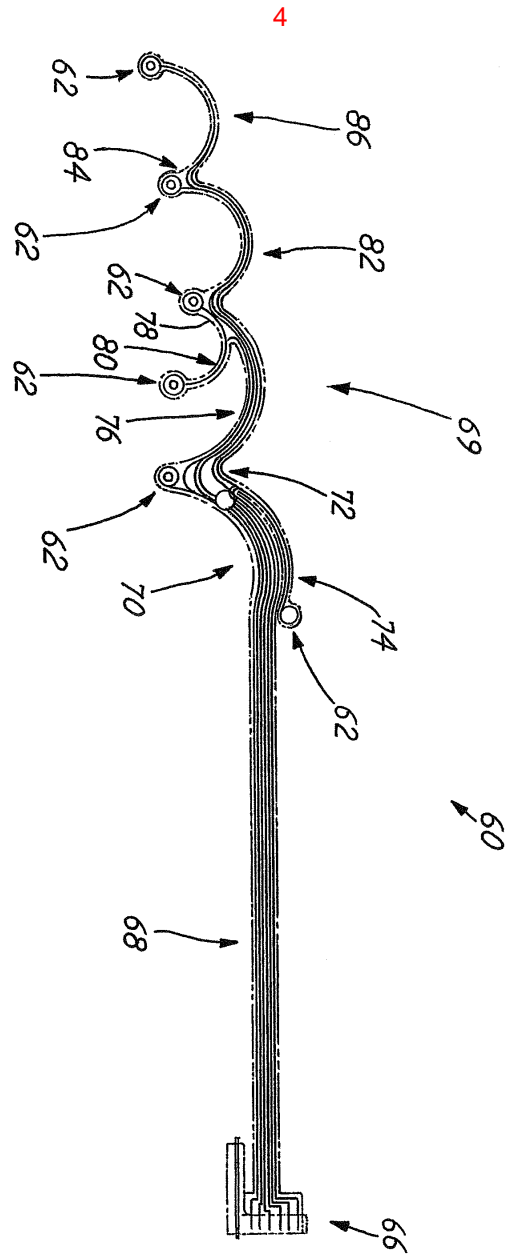
가

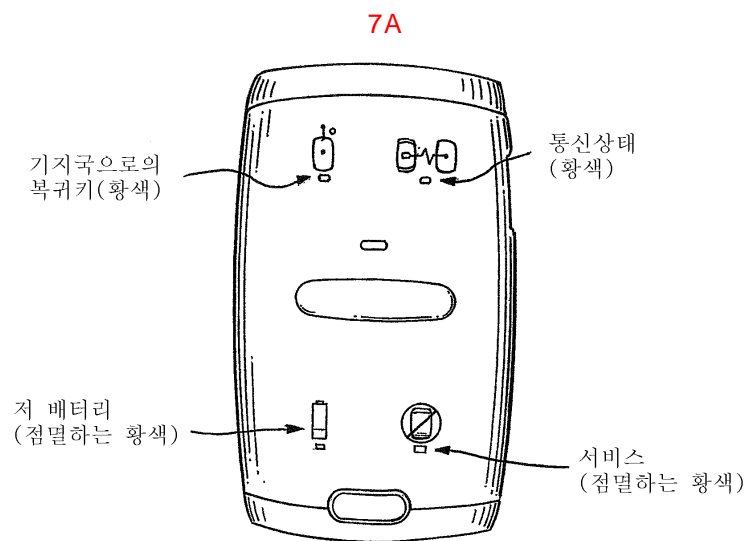
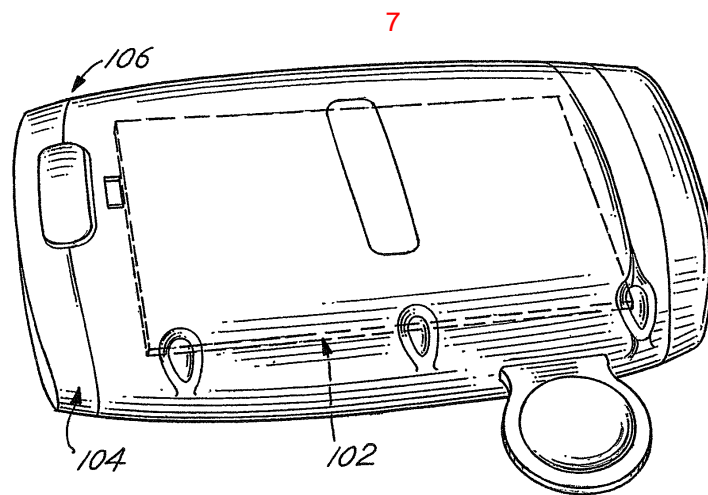
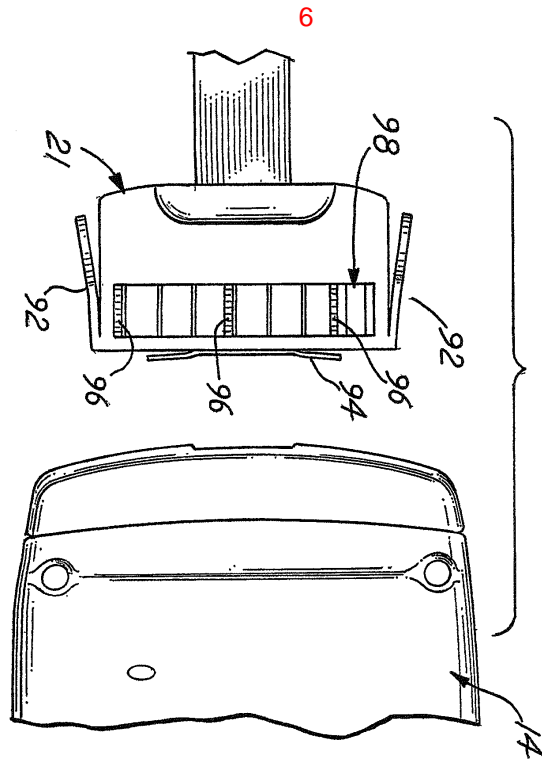


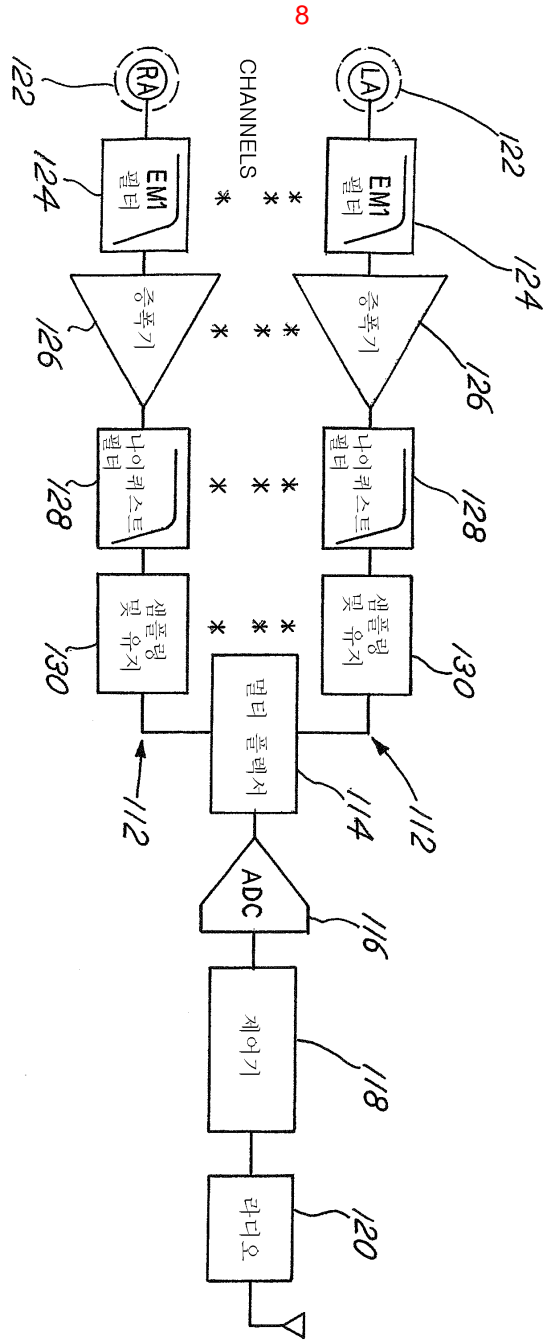
2



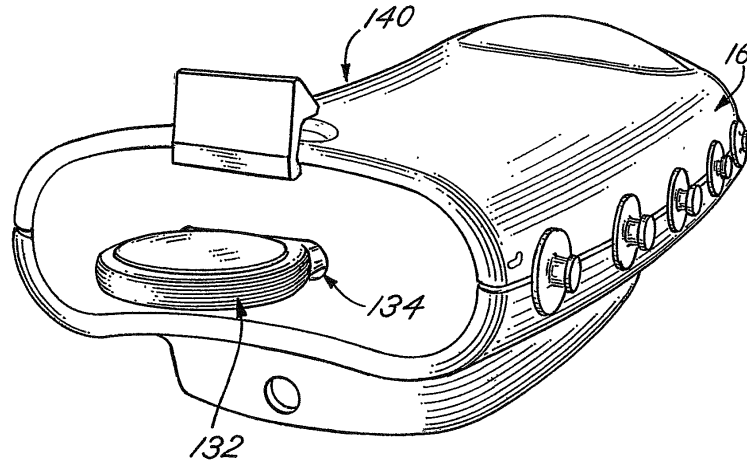




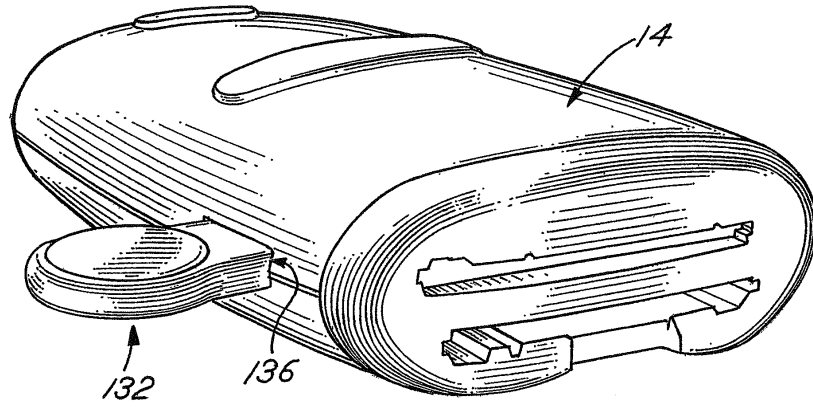




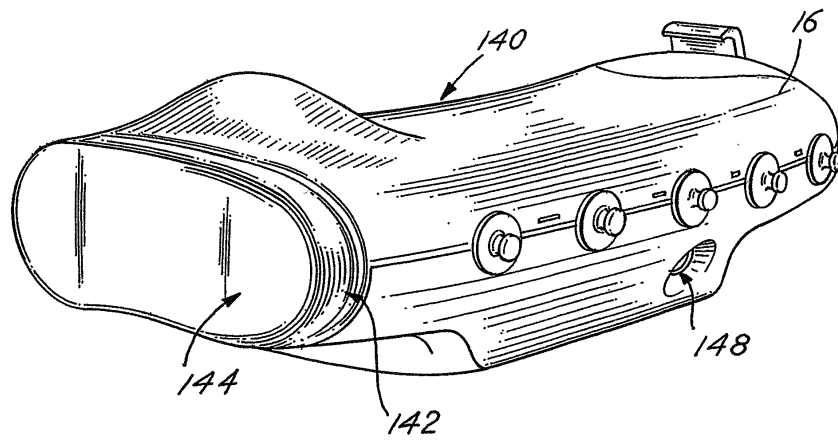
9A



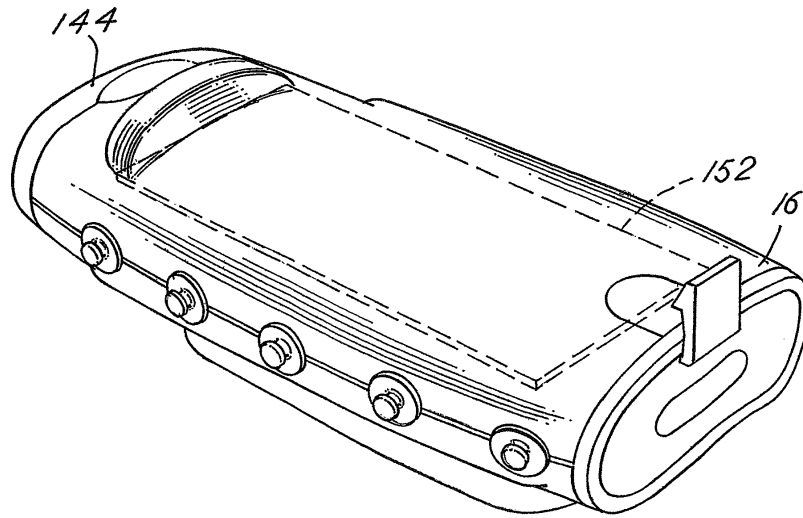
9B



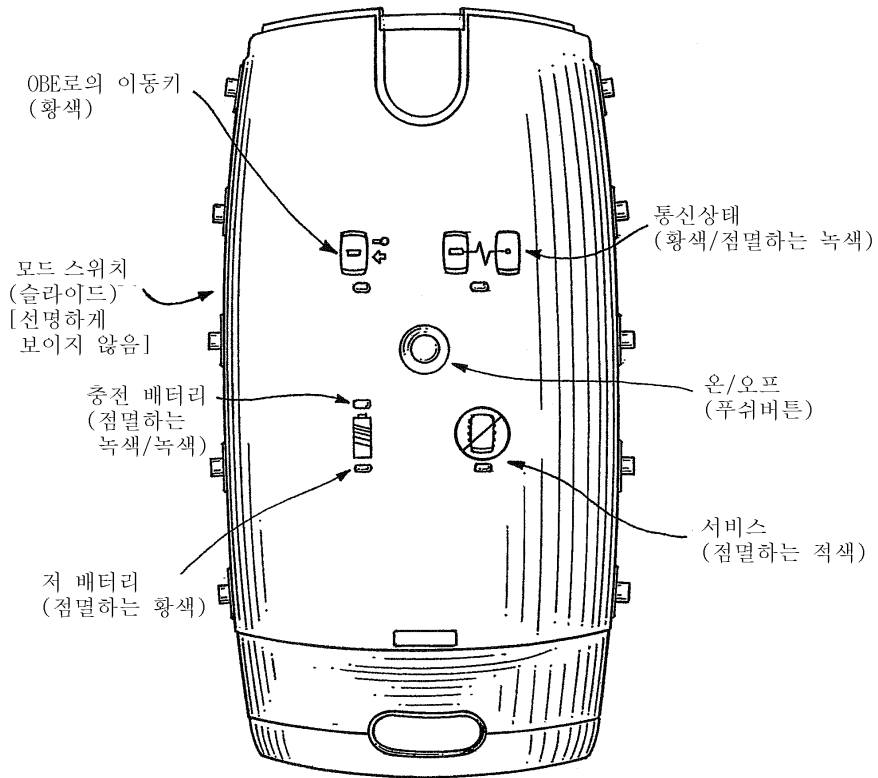
10

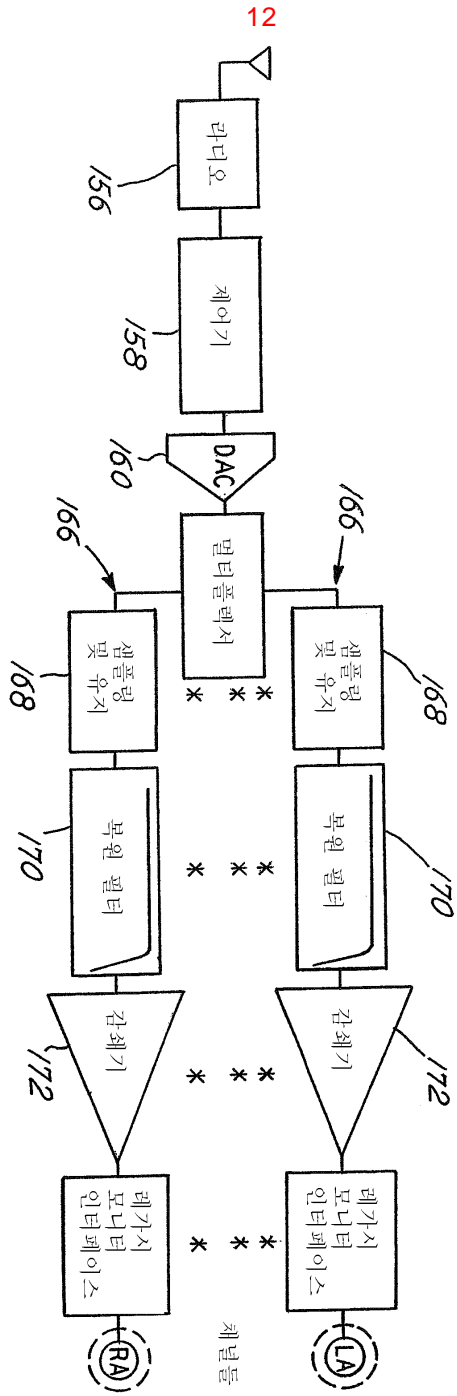


11

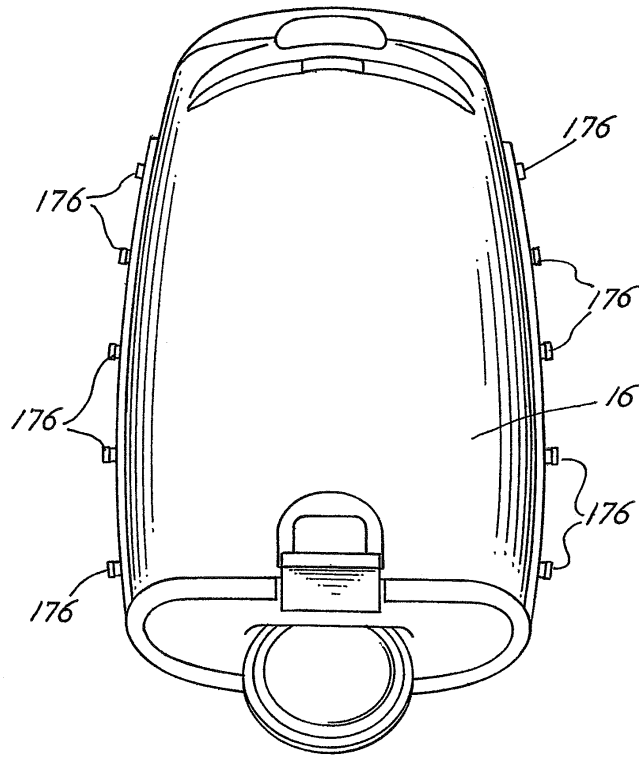


11A

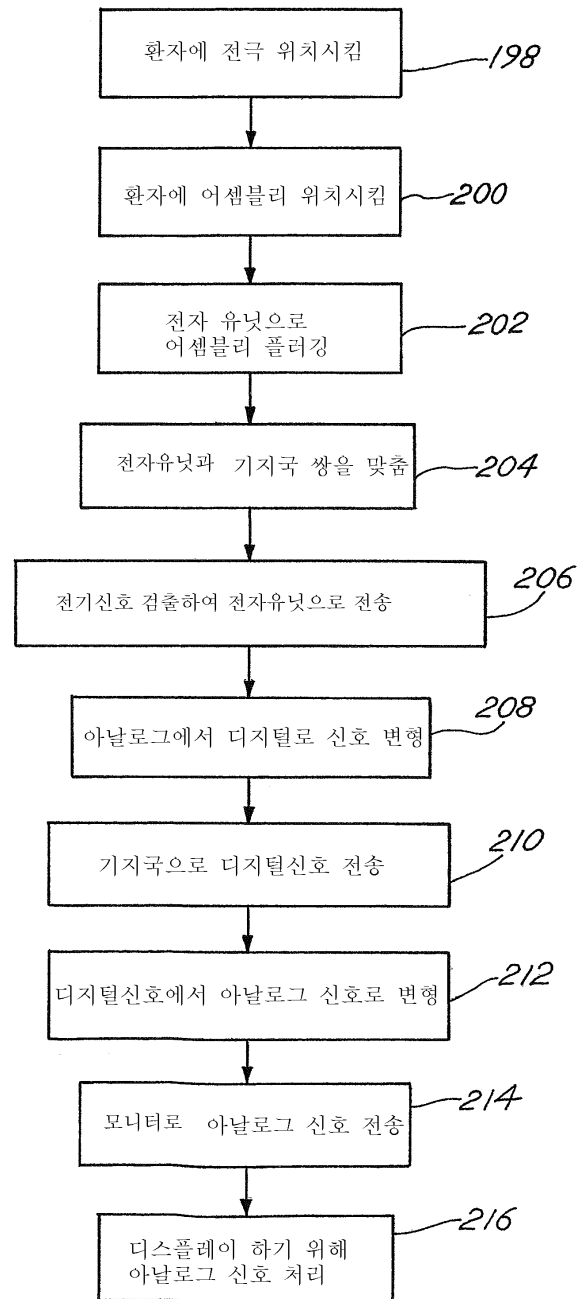




13

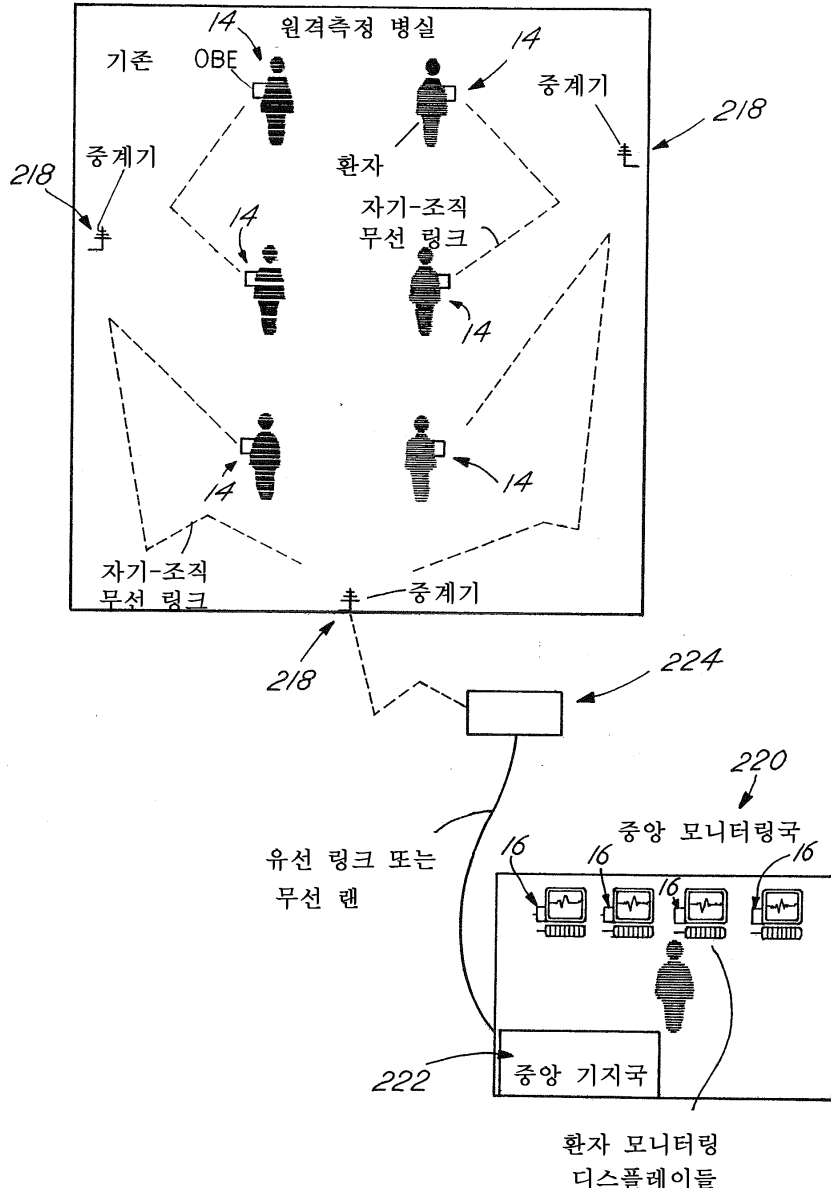


14



15

원격측정 시스템 도시



专利名称(译)	无线心电图系统		
公开(公告)号	KR1020040101210A	公开(公告)日	2004-12-02
申请号	KR1020047011230	申请日	2003-01-22
[标]申请(专利权)人(译)	LIFESYNC LODATO FRANCO WILLIAMS DANIEL大号 霍普曼杯NICHOLASÇ		
申请(专利权)人(译)	生活洗涤鼻子炮升级 用土, 鼻子. 威廉斯, 丹尼尔, 埃尔. 霍夫曼, 尼古拉斯.		
当前申请(专利权)人(译)	生活洗涤鼻子炮升级 用土, 鼻子. 威廉斯, 丹尼尔, 埃尔. 霍夫曼, 尼古拉斯.		
[标]发明人	ISTVAN RUD 이스트반루드 GREGORY BILL 그레고리빌 SOLOVAY KENNETH 솔로베이케네스 CHASTAIN DAVID PAUL 차스테인데이비드폴 GUNDLACH JOHN DAVID 군드라치존데이비드 HOPMAN NICHOLAS C 호프만니콜라스씨 WILLIAMS DANIEL L 윌리엄스다니엘엘 LODATO FRANCO 로다토프란코 SALEM MICHAEL 살렘마이클		
发明人	이스트반,루드 그레고리,빌 솔로베이,케네스 차스테인,데이비드,폴 군드라치,존,데이비드 호프만,니콜라스,씨. 윌리엄스,다니엘,엘. 로다토,프란코 살렘,마이클		
IPC分类号	A61B5/0402 A61B5/00		
CPC分类号	A61B5/0006 A61B5/7232		
优先权	60/350840 2002-01-22 US		

摘要(译)

一种用于检测来自患者的生理数据的系统，更具体地，一种用于检测来自患者的心电图 (ECG) 信息并通过遥测技术将所述信息发送到中央监测站的系统。 1

