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(12) (A)

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(21)	10-2001-0075544	
(22)	2001 11 30	
(71)	- - 5 1 81 8	
(72)	- - 5 1 818	
(74)		
(54)		

(1) (2) (3) .
(1) (2) (1) ,
(3) (2)

1

- 1 ,
- 2 ,
- 3 ,
- 4 ,
- 5 ,
- 6 ,

7 ,

8 .

1 : 2 :

3 : 11 :

12 : 13 :

14 :

15 : -

16 : 17 :

, .

가

, , MRI, X- , 가 (non-invasive choice) .

6,023,637

, ,

가

1. ,

5

2. 가 가 ,

, .

, .

, .

가

1
(2), (3) (1),
(1)
(14), (1) (11), (12), (13),
(15)(16)(/
(17)()
(11) (11)
(11) (16) (2) (11)
(2) (111) (111)
가
(111) (2) (11)
(1) (2)
(11) 가
(111) 가
(11) 가
12 μ m 가 8 12 μ m (11) 8
12 μ m
(13) (11)
(13) InSb(), PtSi(), MCT()
(thermister) 가
(13) (thermoelectric cooler)(12)가
(13) 2 가
(13) (14) (13) (15)
(141) (141) (14) (17) (가, -1 1)
(141)
(14) (15) (14)
(15) (16) (15) (2)
(17) (15), (16) (14)
3
(13), (14), (15), (16) (17)
(1)
(2) (1) (1) (2)

t Interconnect)
(21), 16- (22), PCI (25) PCI (26) , (2) PCI(Peripheral Componen
(21)(HOT
(21) 가 (22) (1) (2)
/ RAM(23)
21
(24) (22) / RAM(23) (1)
가 PCI (24) RAM(23) /
(241), (243)
(244)() PCI (245)
(241) / RAM(23) (22) / RAM
(241) / RAM(23) (241) (243) (241)
(241) PCI (25) (243) PCI
(242) (243)
가 (244) (242) (243) PCI
FIFO 가 250Mbps(가) (245) PCI
(243) PCI (25) (24) PCI (26) PCI
PCI (3) (25) PCI (26) PCI (25)
1 (3) (imaging operating platform)
(3) (visual output)
(31) (32) (31) (2) (plug)
PCI (310) (motherboard)(311) (2) (311
) (31)가 (common computer system)
(power supply)(33), (hard disk drive)(34), (floppy disk dr
ive)(35), (optical disk drive)(36), (modem)(37) (311
) (312), (video card)(313), (38) (314)
(2) PCI 가 PCI (310) (313) (32) PC
(32) (32') , PCI
(245) , 320×240 , 640×480 1024×9
80 (spot) (heat
radiation) (38)(
)가
4 (2)

1.

(Plank's law) , (light intens
ity) 가 1

$$L_E(\lambda, T) = \frac{C_1 W_{atts}}{\lambda^5 \{ \exp(C_2 / (\lambda T)) - 1 \} cm^2 - sr - \mu m}$$

λ (nm), L_E (Watts/cm²-sr), C_1 (radiant flux) 11,911μm⁵ watts/cm²-sr
 C_2 (K) 14,388μm-K
 (11)

$$\Phi_E(\lambda, T) = \frac{\pi A_d}{4F^2} \tau_0 \int_{\lambda_1}^{\lambda_2} L_E(\lambda, T) d\lambda \text{ Watts}$$

Φ_E = , A_d = , F = , τ_0 = .

2. (array detector)(13)

(13) 가 ,

3 .

$$V = R \Phi_E \text{ Volt}$$

Φ_E = , R = , V = .

3. (converter module)(15)

(offset shift)가 , (14)

, (15) (13)
 4 .

$$V = G (V - V_0) \text{ 볼트}$$

$V = \text{ADC}(A/D)$, $G =$, $V_0 =$.

4. (15)

(15) (15)

5 .

$$N = r (V + 1) \text{ 카운트}$$

$V = \text{ADC}(A/D)$, $r = 4095/2$ / .

, (2)가 (1)
 (gain multiplier unit)(241) (242)

(3) (3) / RAM(23) 가 . 가
 , (temperature abnormality)

, 22
 (11) , (2)

(3) (32) 가 가 (1)가 (11)

3 R) , ,

5

(1) (2) (61) 가 (13) 가 (11) (62) (13) (Blackboby source)(111) (15) (T₁) (241) (N_t) (63) (64) 1 (64) (65) (242) (64) (65) / RAM(23) (67) (66) (242) (68) (67) (68) (242)

(13)가 (70) (13)가 (11) 가 (71) (71) 가 P (32) (32) DMA(Direct Memory Access) (74) (Life Imagery)가

C (75) (13) (76) (13) PC (77) (111) (15) (78) (13) (111) (15)

(79) (87) (62) (13) (80) (81) 가 (15) (82) (13) (34)

(83) (13) 가 가 가 (84) (84) (84) (83) 가 (85) (85) (86) (87) (88) PC (32) (83)

(89) (90) (73) 가 (73) 가 (73) (67) (61) (hues) (Life I magery)가

(3) (91, 92) 6 가 (91, 92) 가 (32)

7 (an operating platform)(4) (42) (4) (wheels)(43) (3) (32)가
(4) (4) (gantry)(44) (44) (4
3) (44)가 (1) (1) 3
8 (a vertical rod portion)(440') (4') (44')
(a hanger rod)(45') (440') (441') (451')
(1) (45') (452')
(a greater degree of movement)

1. 가
(a) 가 , 가 가 ,
(b) 가 (a) 가 .
가

2. , , ,
가 .

3. (1) (13), (14), (15), (16) 가
(17) 가 ,
PCI (2) .
가 , 가
가

(57)

1.

:

(1) ;

(1) , (1) ,
(2);
(2) , 가 (3)
) ,

2.
1 ,
(1) 가
(11) , (2) (11) ; (11)
(111)
(11) , (13)
) ;
(13) , - (15);
(15) , (2) (16)

3.
2 ,
(1) (13) (12)

4.
2 ,
(1) (13) (15) , (15)
(14)

5.
2 ,
(111) (2) 가 가

6.
5 ,
(2) ,
(11) ,
(111) ,
(1) ,

7.

1 ,
 (2)
 (11) (11) (21)
 ;

/ (23) ;
 (21) / (23) , / (23)
 (21)
 (24)

.

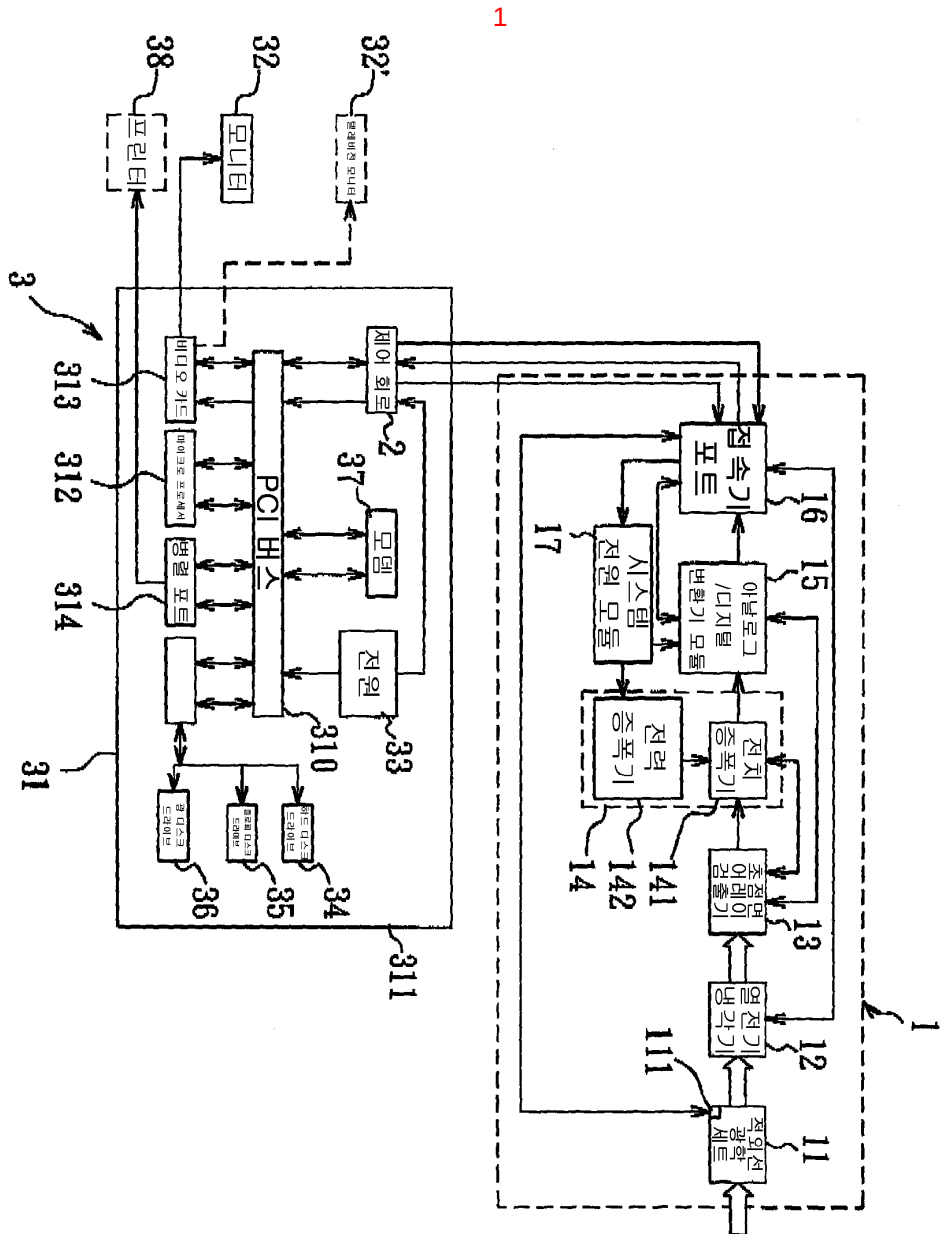
8.
 7 ,
 (24) ,
 (21) / RAM(23) ,
 (21) (241) ,
 (241) / (23) ,
 (241) (242) ,
 (242) , (242)
 (243)

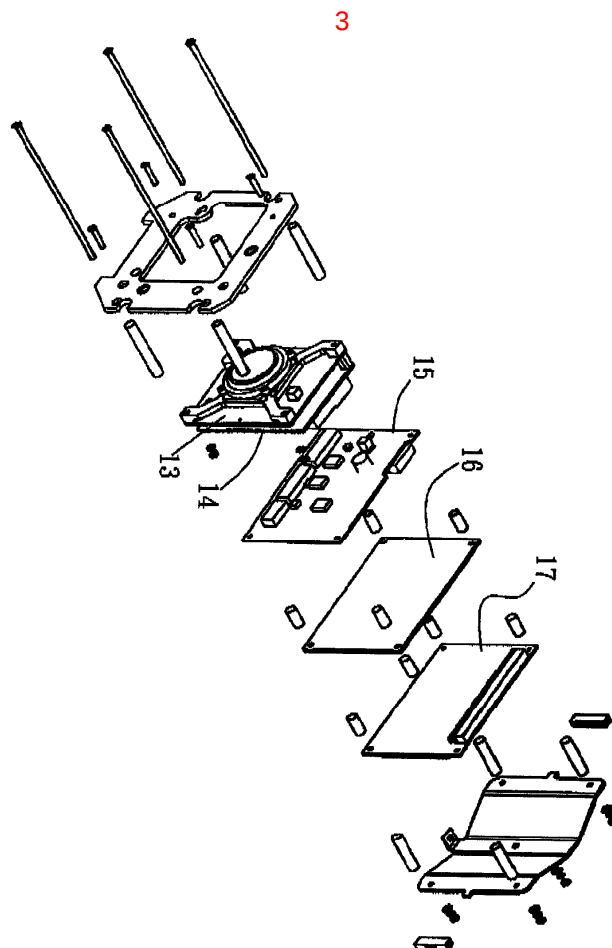
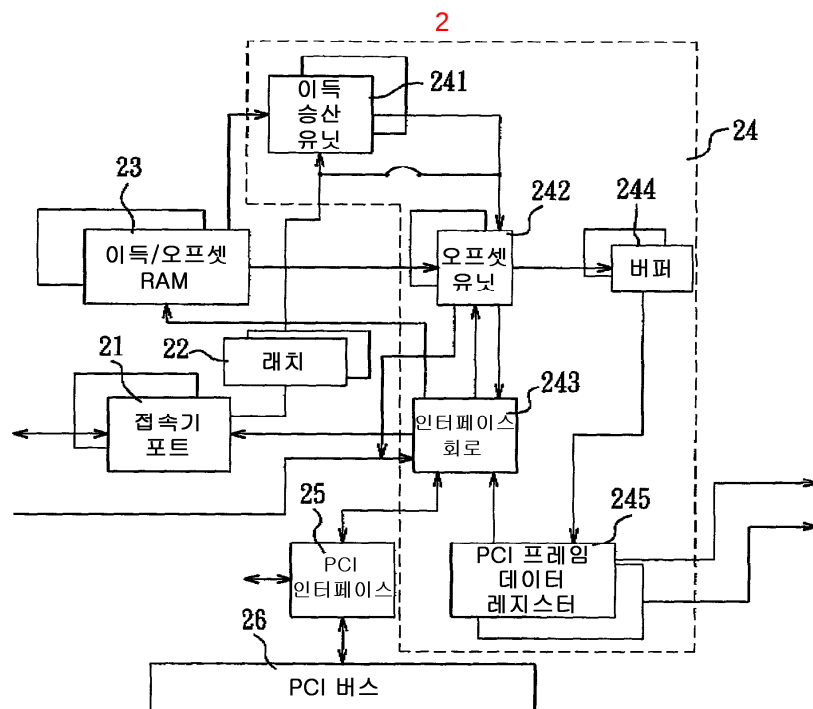
.

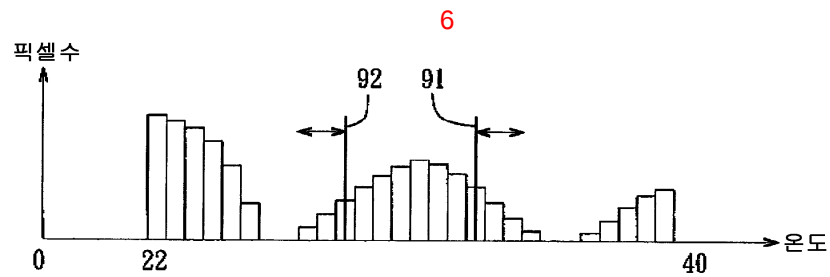
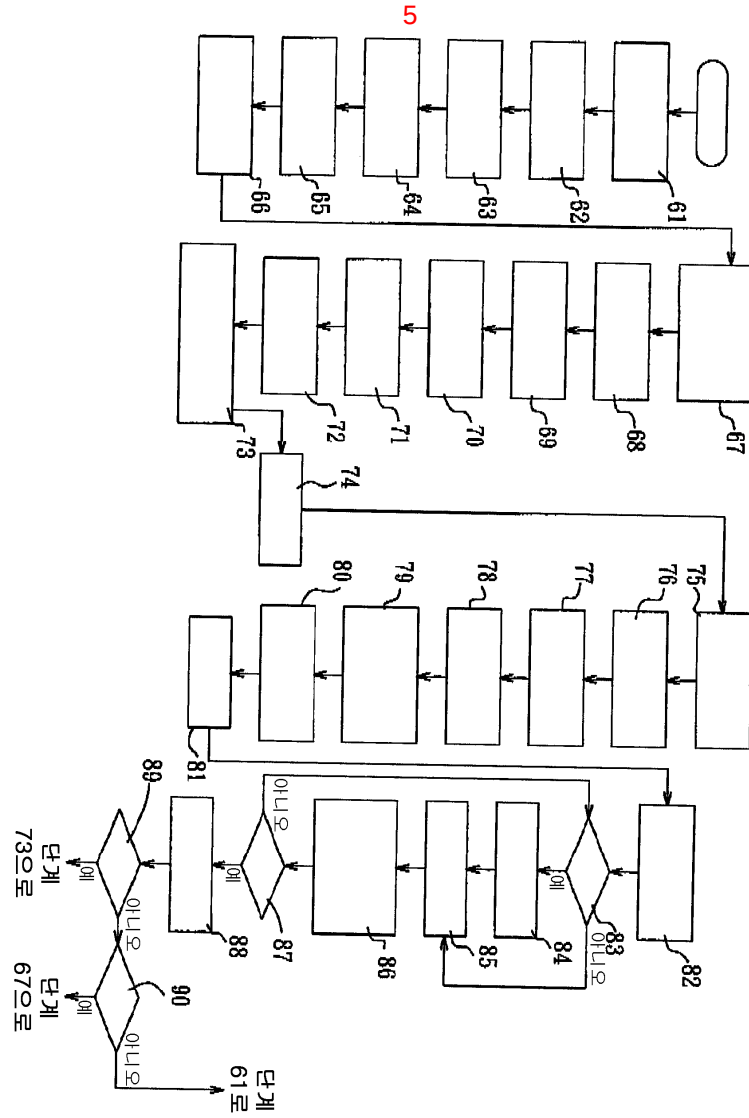
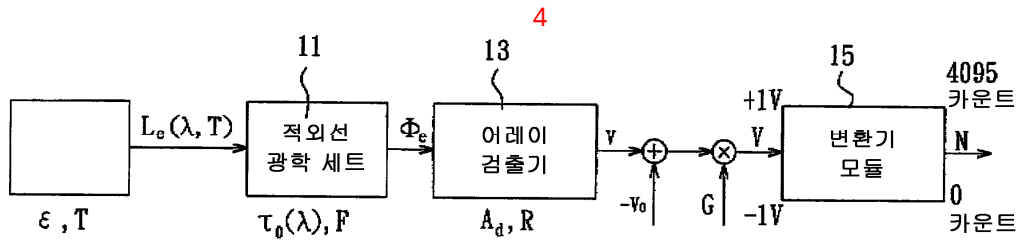
9.
 1 ,
 (2)가 .

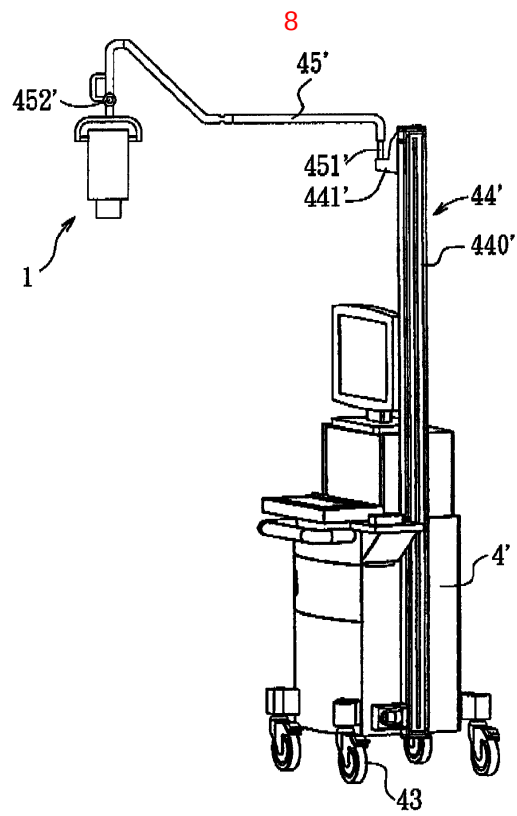
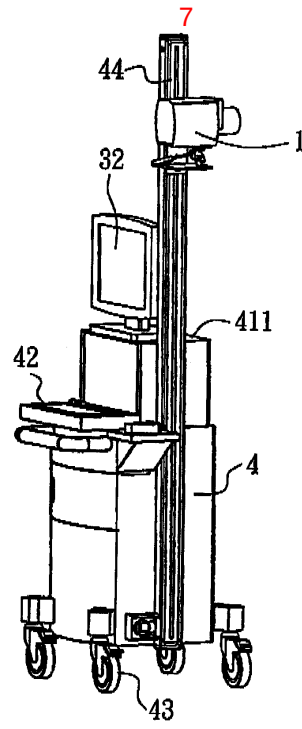
10.
 1 ,
 (3) (4, 4') .

11.
 10 ,
 (4, 4') (1) (44, 44')
 .









专利名称(译)	数字红外热成像系统		
公开(公告)号	KR1020030044699A	公开(公告)日	2003-06-09
申请号	KR1020010075544	申请日	2001-11-30
申请(专利权)人(译)	电视) 技术的激光炮的鼻子		
当前申请(专利权)人(译)	电视) 技术的激光炮的鼻子		
[标]发明人	CHANG DAVIDO		
发明人	CHANG,DAVIDO.		
IPC分类号	A61B5/00		
代理人(译)	KIM, CHANG SE KIM , WON JOON		
外部链接	Espacenet		

摘要(译)

目的：提供数字红外热成像系统，以提高精度，便于操作和维护方便。
组成：数字红外热成像系统包括一个红外探测器（1），用于创建对应于来自测试对象的平面的红外辐射的强度水平的数字数据；控制电路（2），其耦合到红外检测器，并且从红外检测器接收数字数据，并通过处理数字数据产生反映来自测试对象的平坦表面的红外辐射的强度水平的图像帧数据；显示单元（3）耦合到控制电路，并产生对应于图像帧数据的可见输出。

