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(22) 2004 10 18
2004 10 18
(86) PCT/GB2003/001729 (87) WO 2003/088829
(86) 2003 04 22 (87) 2003 10 30

(30) 0208945.6 2002 04 19 (GB)
(71)
(72) , , 9 6 14
(74)
:

(54)

, . 2가

1

, 가
(preclinical stage) 가

가 .

(cardiac output) (peripheral resistance)
(steady - flow system) .
(left ventricular ejection) (stroke volume)

가 , (large arteries) 가
(abnormality)

가 - 가 가 ,

가 /
가

가
5
() ,

가 2 - 4Hz
가

가

1 , 가 (intra - ocular pressure) , 가 (retrobulbar)

,

,

가

,

가

(telemetry system)

(pneumotonometer)가

가

가

(Fourier Transform)

2

(ocular network)

가

가

가

1

(applanation tonometry)

2

3

4

5

6

1 2 1 1 2 (1)
 (3), (ophthalmic artery)(5), (9)
 (bolus) (11) (5)

, 1 (23) (applanation) (tonometer)
 (13)

2 (17)
 (1) (19) (21) (19) (5) 가

(13) (pneumotonometer)
 try)((Prardigm Medical Industries)
 (Smart Lens DCT)
 0-12Hz (dynamic range) 가
 (pneumatic)
 (13) 200Hz 0.01mmHg (15) (resolution) (23) 가 20
 (bed) (compliance)가
 (Oxybuprocaine) 0.4%

가 가 (9) (9)

(rigidity) (viscoelastic)
 (9)
 (ocular coat)

(scleral rigidity)

2 (17)
 Phillips ATL HDI3500 Ultrasound Machine
 가 B-
 2 가 가 가 (branch) 가

(cineloop review)가 (authenticity)

(17) (7)

(9) (9)

(Calibre)

가

(9) 가

(electrical circuit analogy) (tree) (windkessel)

2

(respiratory variation) 가 (apparent compliance)

2 () 3 4

3 0.9s

4 0.9s

tangent method) ECG (gate)

$$\begin{aligned}
 & \text{3} \quad \text{4} \\
 & = \text{FT} [P(t)] \quad V(\omega) = \text{FT} [(V)] \\
 & \omega = P(\omega) / V(\omega) \quad \phi(\omega) = \phi p(\omega) - \phi V(\omega)
 \end{aligned}$$

P(ω)

Z(

5 6 $Z(\omega) \quad \phi(\omega)$

1 가 (end diastole) 1 (initial up

stroke) (foot)

(17)

ECG

() () 5

A B

(extrapolate) 가

가

가

(diastolic decay)

(pure monoexponential)

erial tree)

(damped resonance)

(art

가

(microvascular) 가

(microinfarct)

(Peripheral Resistance)

(57)

1.

(intra-ocular pressure) (retrobulbar)

가

2.

1

3. 1 2 , , 가
4. 1 3 , (solid state transducer)가
5. 4 , 가 (telemetry system)
6. 1 3 , (pneumotonometer)가
7. 1 6 ,
8. 7 , (doppler ultrasound imager) ,
9. 1 8 가 (motion picture)
10. 9 , 가
11. 1 10 , 가
12. 1 11 , (Fourier Transform)
13. 1 12 ,
14. 1 13 ,
15. , :
- (ocular network) ;
- ;

16.

15

가

17.

16

18.

15

17

가

19.

18

20.

15

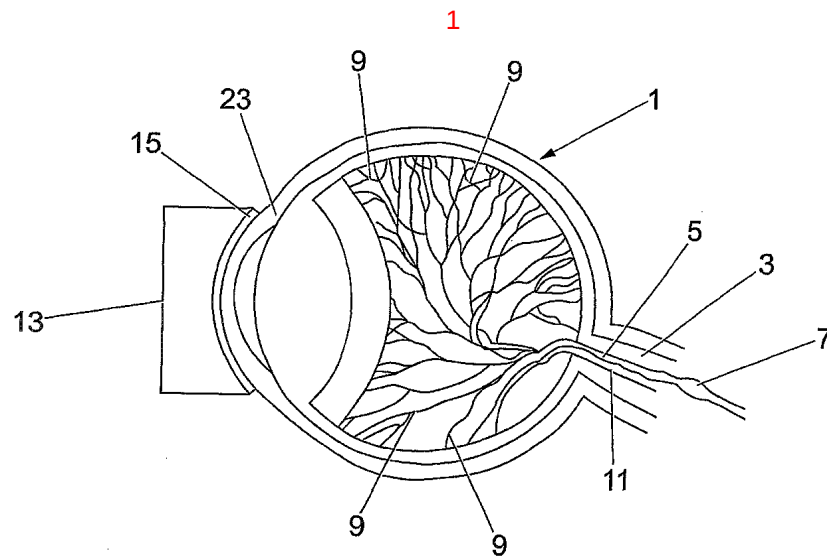
19

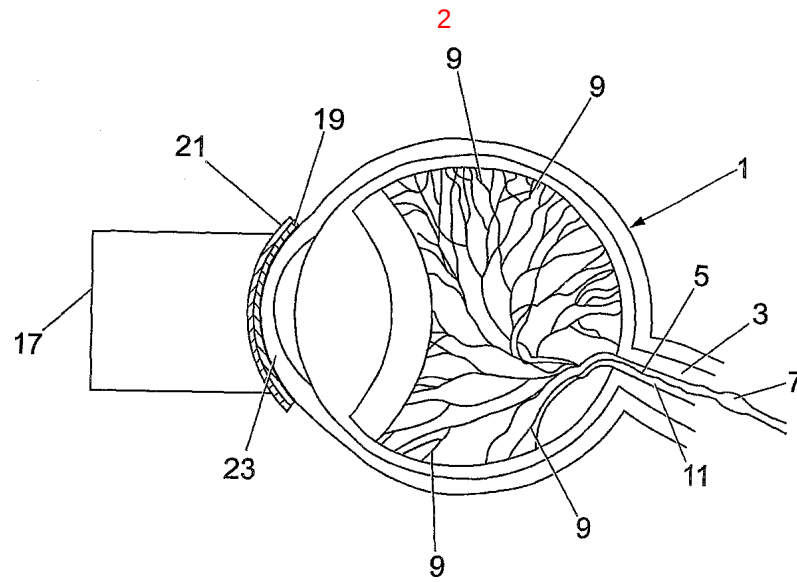
가

21.

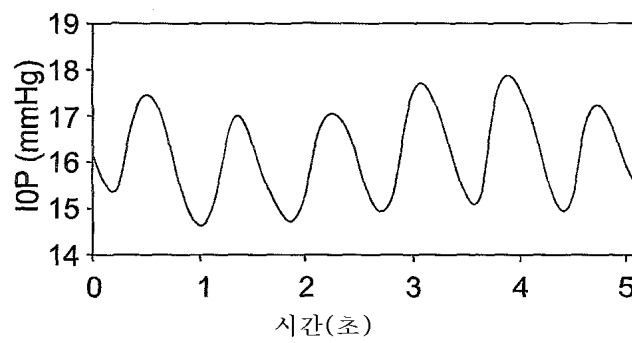
15

20

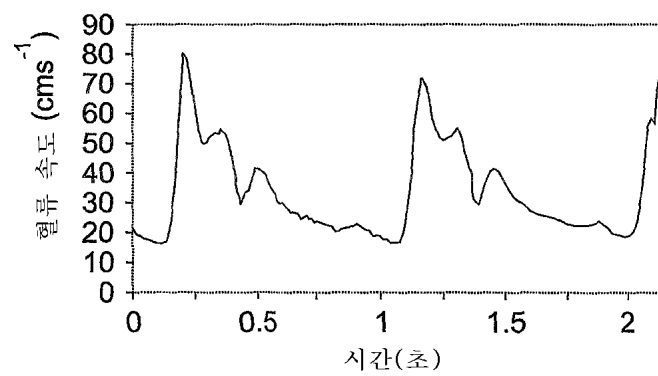


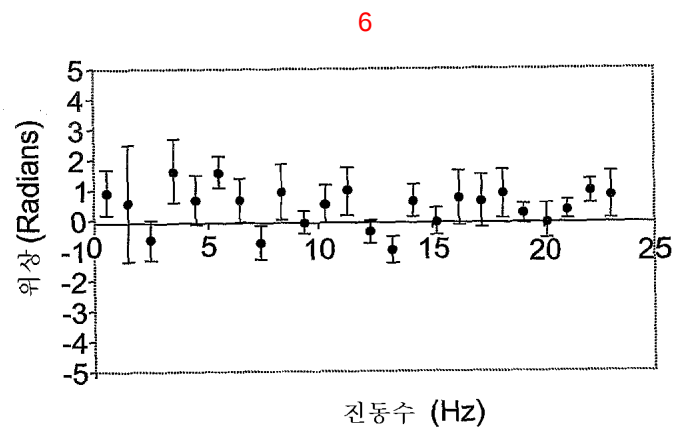
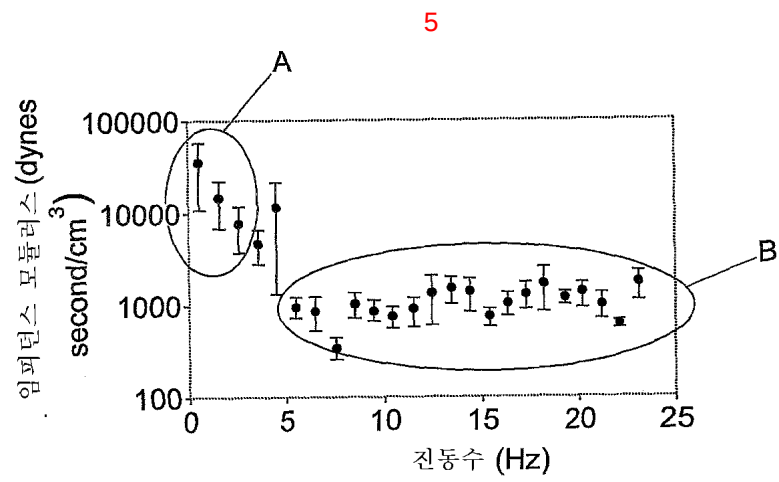


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4





专利名称(译)	容器阻抗测量装置		
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摘要(译)

提供了一种用于测量体内眼循环的血管阻抗的装置和方法。从引导压力的测量记录压力脉冲波形，并记录后循环中血流的速度分布。这两个记录用于计算血管阻抗模量。 1

