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(12) (A)

(51) Int. Cl.⁷
A61B 8/00

(11)
(43)

10-2004-0066836
2004 07 27

(21)	10-2004-7007757		
(22)	2004 05 21		
	2004 05 21		
(86)	PCT/JP2001/010235	(87)	wo 2003/043501
(86)	2001 11 22	(87)	2003 05 30

(71)	가	가	1	1	1
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(72)	3	3578-936
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가	3	16-10
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가	2-202-17-B101
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(74)

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(54)	,	,
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(1)	,	,	(1)				
				(21)	,	(22)	,
				.			
가					가		

가 가 (「 」, 「 」) (「 IASSIT: Intelligent Assistant System 」) ,

2 CW(M ()/PW())/B CFM() (), B

,
Doppler Imaging:),
TDI(Tissue Harmonic Imaging),
THI(Tissue Harmonic Imaging),
CHI(Contrast Harmonic Imaging),
(B) () 3D 3D ,
ACM(Automated Cardiac flow Measurement)

TDI, THI, CHI, 3D , ACM

()가 , 가 가

) (2001-137237).

가 ,

가 , , ,
가 () GUI(, , , , ,) (beginners) ()

2001-137237 2001-137237

，「 」 (同義) .

가 (, , ,
C++ Visual Basic
ActiveX () JAVA 가 .

XML(eXtensible Markup Langua

(navigation)

, (, amp;) ,

24 (1) ,
25 ,
26 (2) ,
27 ,
28 ,
29 28 ,
30 ,
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32 ,
33 ,
34 ,
35 ,
36 .

4),	(31), (35), (38),	(32), (36), (39),	PC (40)	(33), (37), .	(3)
	(31)) ((1) (23a) .	(14) (D1), .	PC(3) (.	(32) (D2))
	amp; ().		(1) (23a~23a)	(13) .	PC(3)
,	(31) (21) (24)	,	(25)	(D1, D2) ,	(21)
)	(32) (1) ,	(14)	(31) PC(3)	(32) ,	가 (W21)
					.
	(33)	가	(23a)	.	.
,	(34)	(31)	(,	(23a)
					.
	(35)	(31)	,	,	.
					.
가	(21) (14)	(36) ,	(2) (32) ((1)가 (2) (W30)	.
PC	(37)	(1)	, PC(3)	(22)	.
,	(1)	/	(38) ,	(31) PC(3) (D1, D2)	/
,	.	.	.	(PC XML)	.
(()	,	(39) (23a)	(1) PC(3) ,	(23a)
(()	,	.	.	.
	(40)		가		

2. _____
, (31~40) (21)
3 (21) (1) (14) PC(3) (32)
GUI GUI (W1)

6	(D2)가	(W11), 5	1 ((TB11))
6	(D2)가	(W11) 가	(W10)	가	(W13)
7	(W12) (23a)	(W10) (23a)	(W12)	(23a)	(W10)
	(TB12)	(AP) 「 + 」	amp;	amp;	가
	(AP) 「 」	(TB12) 「 」	(AP)	1 4	1 4
7	(AP)(, ,)	(W12) (MO))	「 」)	(TB12)	
7	(AP), (W13)	(W12) (AP)	가 amp;	(WF)	(W10) 가
8 (a) (b)	가	(W10) (TM)	(TM)		(TM)
D2) (1) (PC3)	(TB2), (TB4),	(22) (TB7),	(TB1), (D1, D2) (D1, D2) (TB8)	(TB3), (D1, D2) (TB5),	(D)
(TB6),			(WF)		
	(TM))	가 /	(BR) 「 」 (M5) 「 」 (GUI: #1)		
9 (CB)	(W10) 가 가 (CB)	가 (1) (CB)	(「 」	가
10	(W10) (SB)				
2)	(SB) 「 」 (SB2), 「 」 (SB4)	1 「 」 (D1, D2)	(SB1), 가 (W10) 「 」 (SB3), (WF)		
11 0)	(W10), (22) (HW)	(HW) ()	가 (HW)		

, (W1) , 가 (W13) , (AP) , , 16 ,
 () , (AP) , , 15 , 가 , , 가
 () ,
 17 (13a) (AP) , , 17 , 가 , , (W13) (AP) , (AP) , ,
 Ctrl , 1[pix()] , , () , R:51, G:255, B:255 , , ,
 (AP) , (AP) , (AP~AP) , (AP) , (AP) , , (AP)
 (AP) , 가 , ,
 () ,
 , (AP) , (23a) 가 , , (AP)
 () , , , , ,
 , (BR2) , (M4) , (M4) , (AP) , (AP) , , , , (AP) , ,
 AP) , (M4) , (AP) , , , , 1 , 가 , , ,
 가 , ,
 18 (23a~23a) (W13) (AP) , (23a) 가 , , (AP)
 amp; (W13) (AP) , ,
 () ,
 (W13) , (AP~AP)
 「 MS-Word 」
 , (W13) (BR2) , (M5) , (M5) , (AP) , , , ,
 「 」 , (M5) , (M5) , (AP) , , , ,
 () ,
 19 (13) (AP) / (BR2) , (M5) , (M5) , (AP) , , , (W
 , , , ,
) , 가 , 1*1[pix()], 19 , , ,
 8, 36*36[pix] , , , (M5a)(12 (b)
 (AP) , 9*9, 18*1

, 24 (W14)가 (TX1), , (TX2), OK , () 5)

(W14) (TX1) 「Sub1」 , 24
(W14) , (TX1) 「Sub1」 . , OK
(W13) (AP1) . 24

, (AP1) (BR1) ()

(1)() GUI

GUI

(23a) 가
「EXIT」

(AP1) , (W13)

25 (W13a) . (W13a)
25 (W13a) (WF)가 (W13a) .

26 2 (23a)

(W13) (AP) (WF) . (AP~AP)

, (BR2) 「 (M3) 「 , (W14) 」 , (M7)
」 (AP~AP) 「 Sub1 」 , (W13)
(AP1) . 「 Sub1 」)

28 29 (23a)
I/F() (23a)
(AP)
(ActiveX) I/F (23a) 가).

) , 1) (BR2) 「 」 (M4) 「 」 (, 3)
 , 2) (AP) 가 (가 「 + 」)

Windows
가
(W30)
Windows
가
「VE.ini」
OS가 Windows
).
가
5MB

가 (1) (23a) 가
가 ,

4.

5.

, (33)

(33)	,	가	(1))	.	.	.
(,	가		,	,	,
,		I/F	()가	,	,
,		가			,	,

6.

, (34)

(34)

(WF)

(WF)

(23a)

7.

, (35)

(35)

(WF)

(WF)

, (23a) , 가 (23a)). , , (WF) 가 .

8.

, (36)

(36)

(21)

(21) (가 , () 가)

(W30)

(1) 가

(WF)

(21)

9. PC

, PC (37)

PC (37) OS(45) 가). (22) (1) (11) PC(3)

36

36

가

(22) (St1), , . (amp; 5) (St2), (AP~AP)
 A, B, C, D, E
 (21) , , () .
 가 , .

(WF)가 (AP~AP)amp; (D1, D2)가 , (2) , (D1, D2)가 .

(57)

1.

2.

1

3.

1

4.

1 ,

가

5.

1 ,

6.

5 ,

XML(eXtensible Markup Language)

7.

,

가

8.

7 ,

amp;

9.

,

,

amp;

가

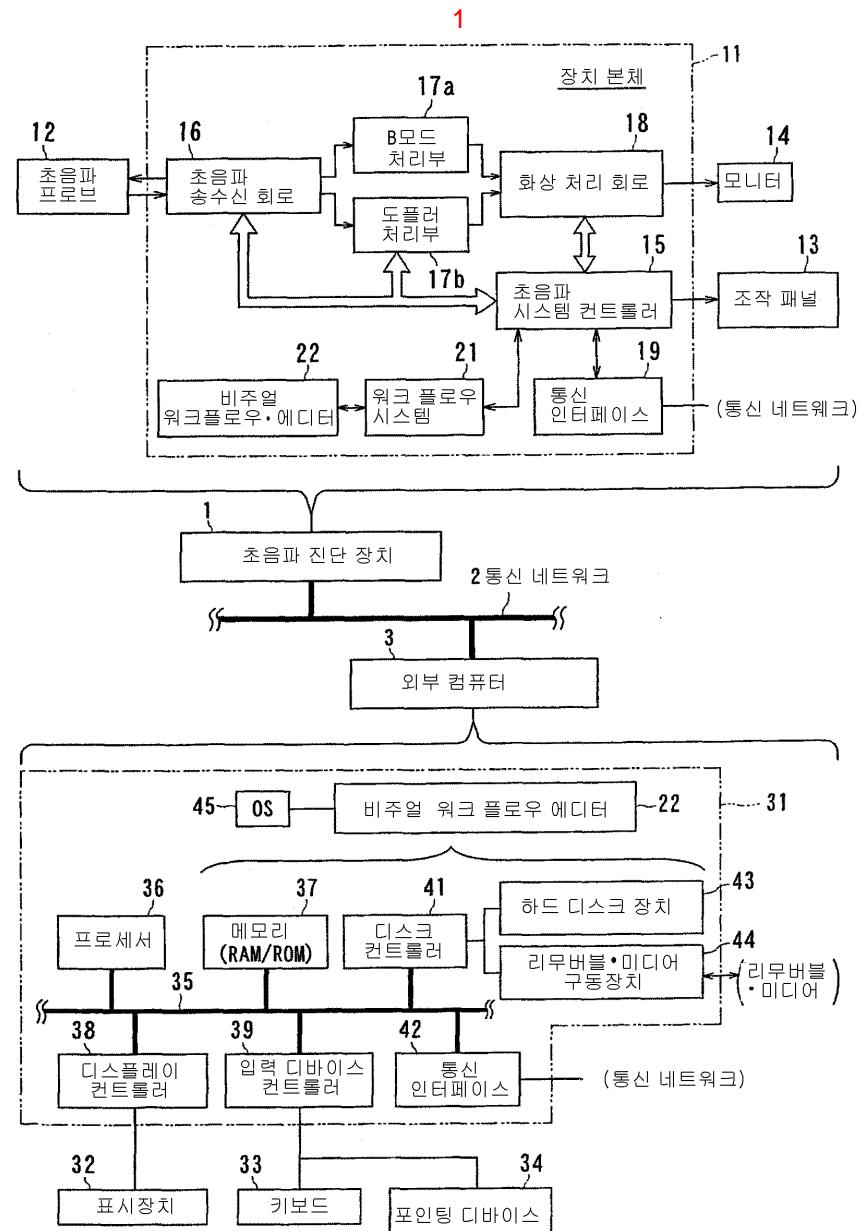
,

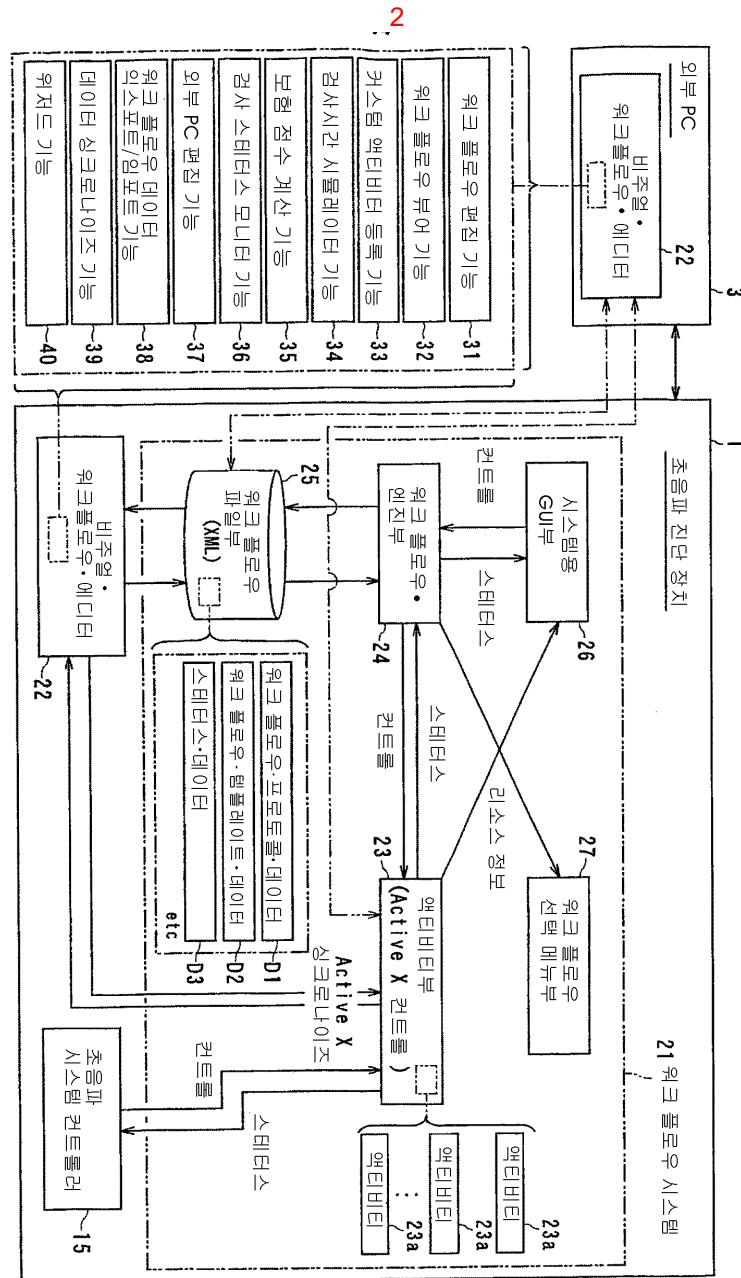
가

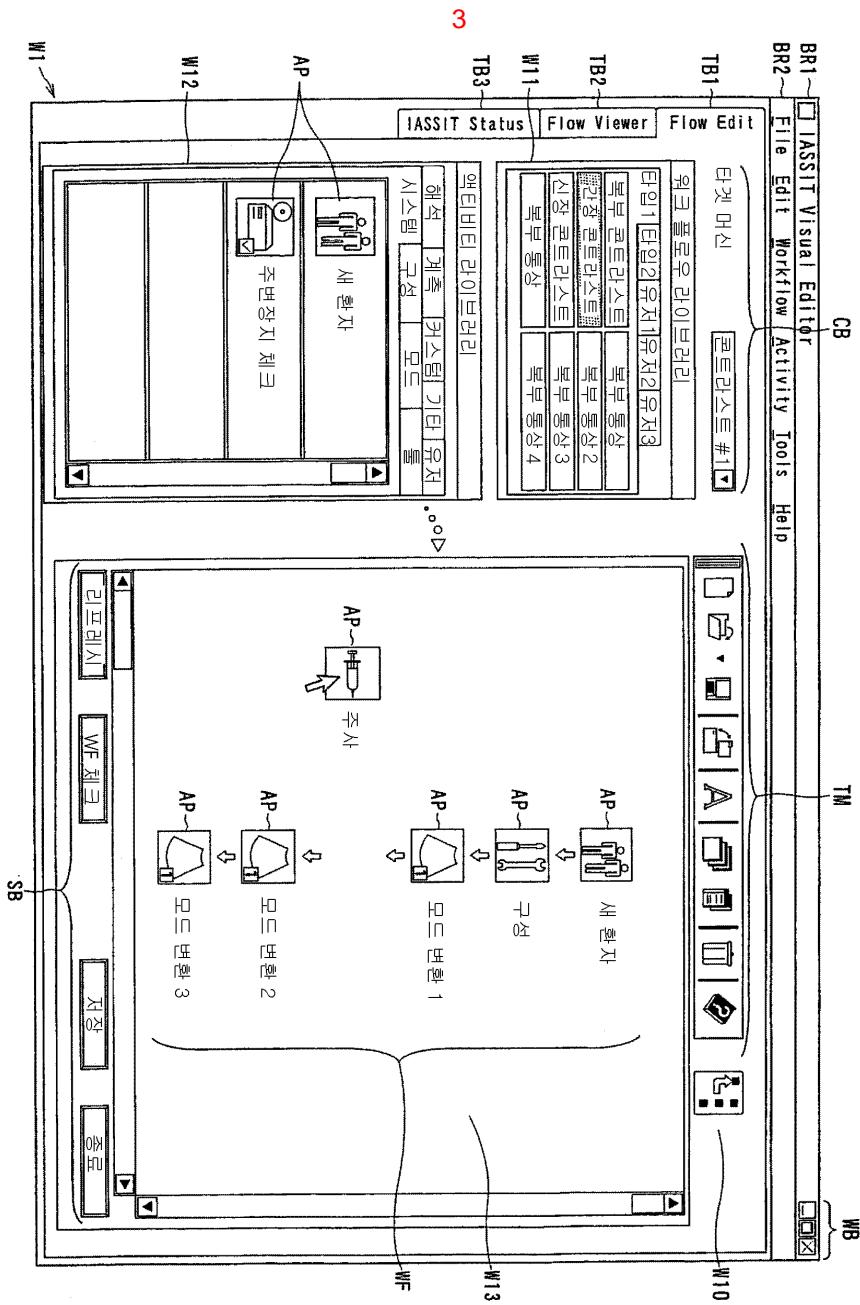
10.

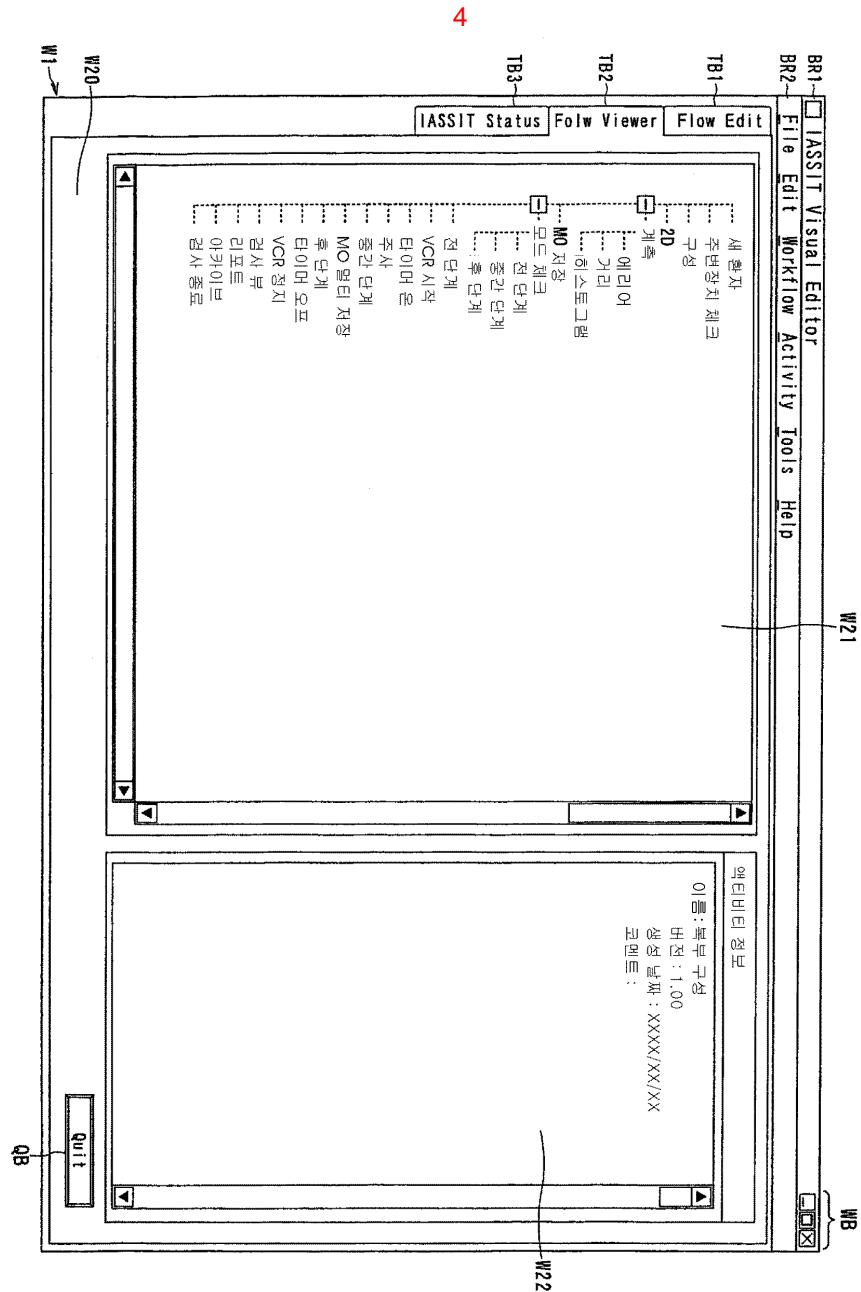
9 ,

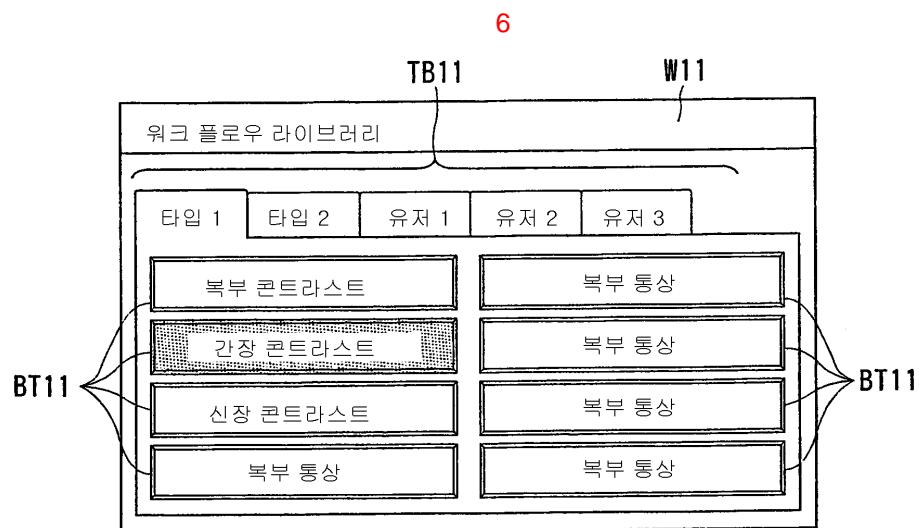
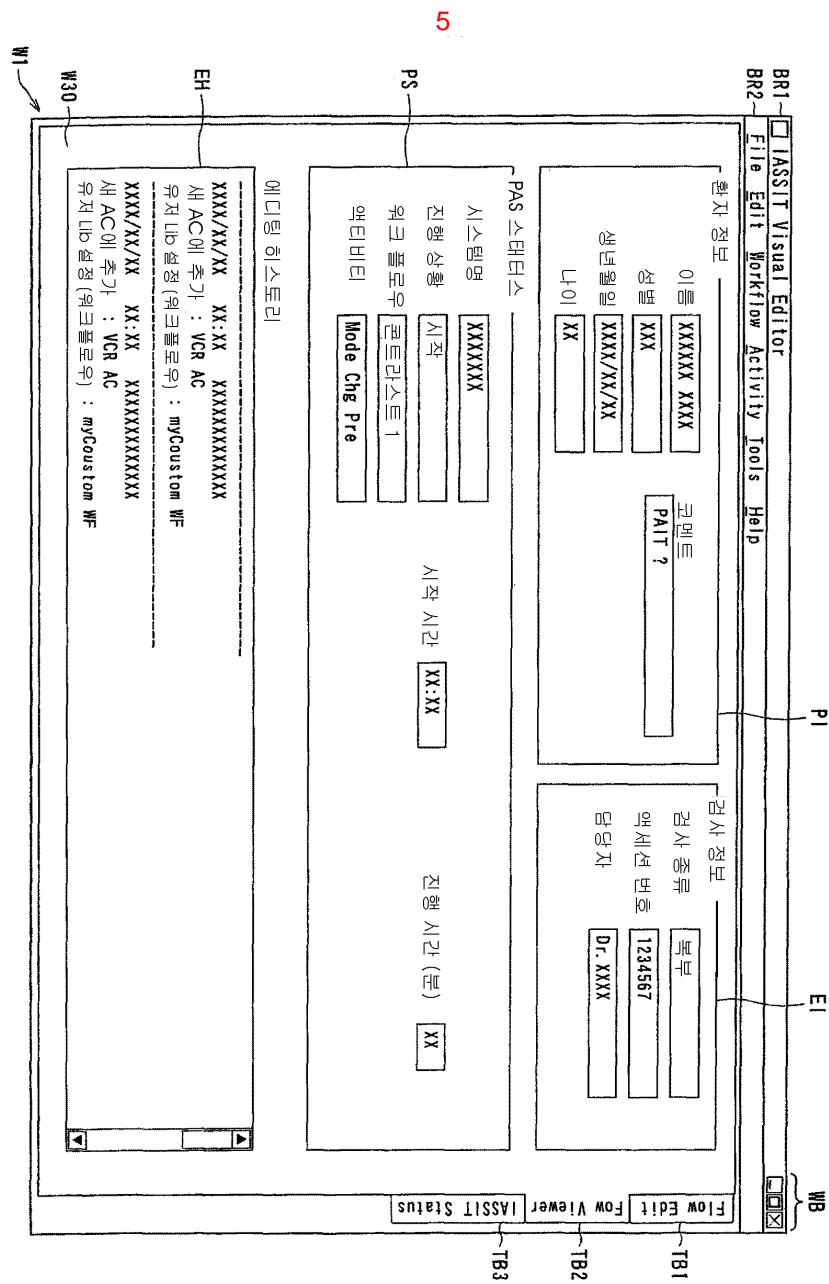
,

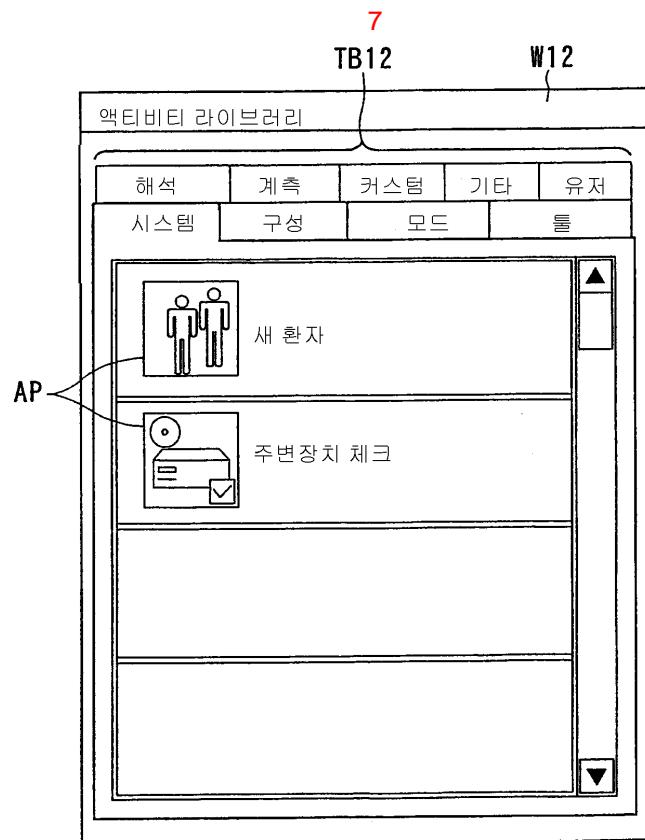




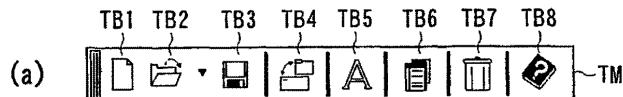








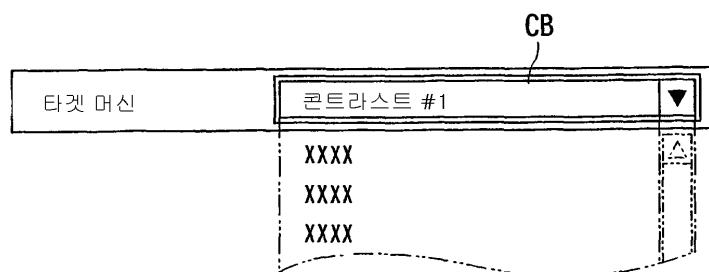
8



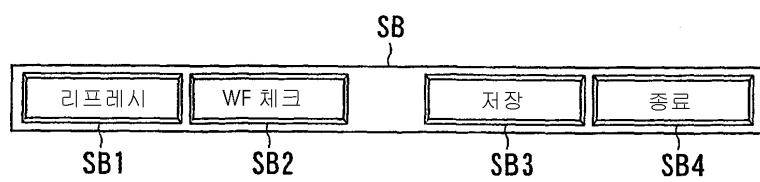
(b)

툴 버튼의 종류	기능
TB1	신규로 워크 플로우 설계 화면을 작성한다.
TB2	로컬 디스크에 보존하고 있는 워크 플로우 데이터를 읽는다.
TB3	워크 플로우 데이터를 로컬 디스크에 보존한다.
TB4	다른 초음파 진단 장치나 외부 PC상의 비주얼 에디터로 워크 플로우 데이터를 이용하기 위해 데이터를 익스포트 한다.
TB5	서브 워크 플로우의 작성
TB6	코멘트 기입
TB7	선택한 오브젝트의 삭제
TB8	헬프 표시

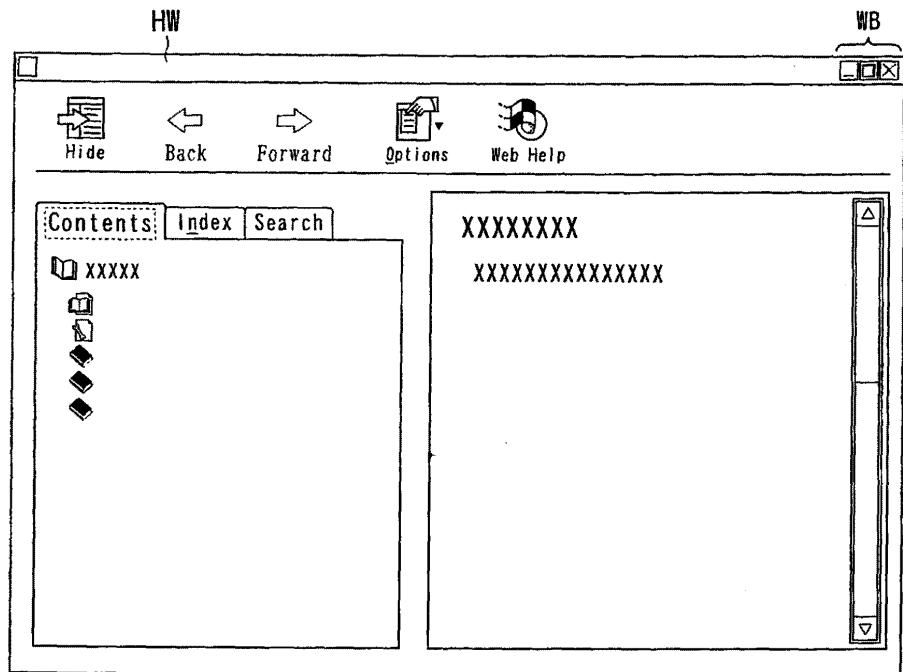
9

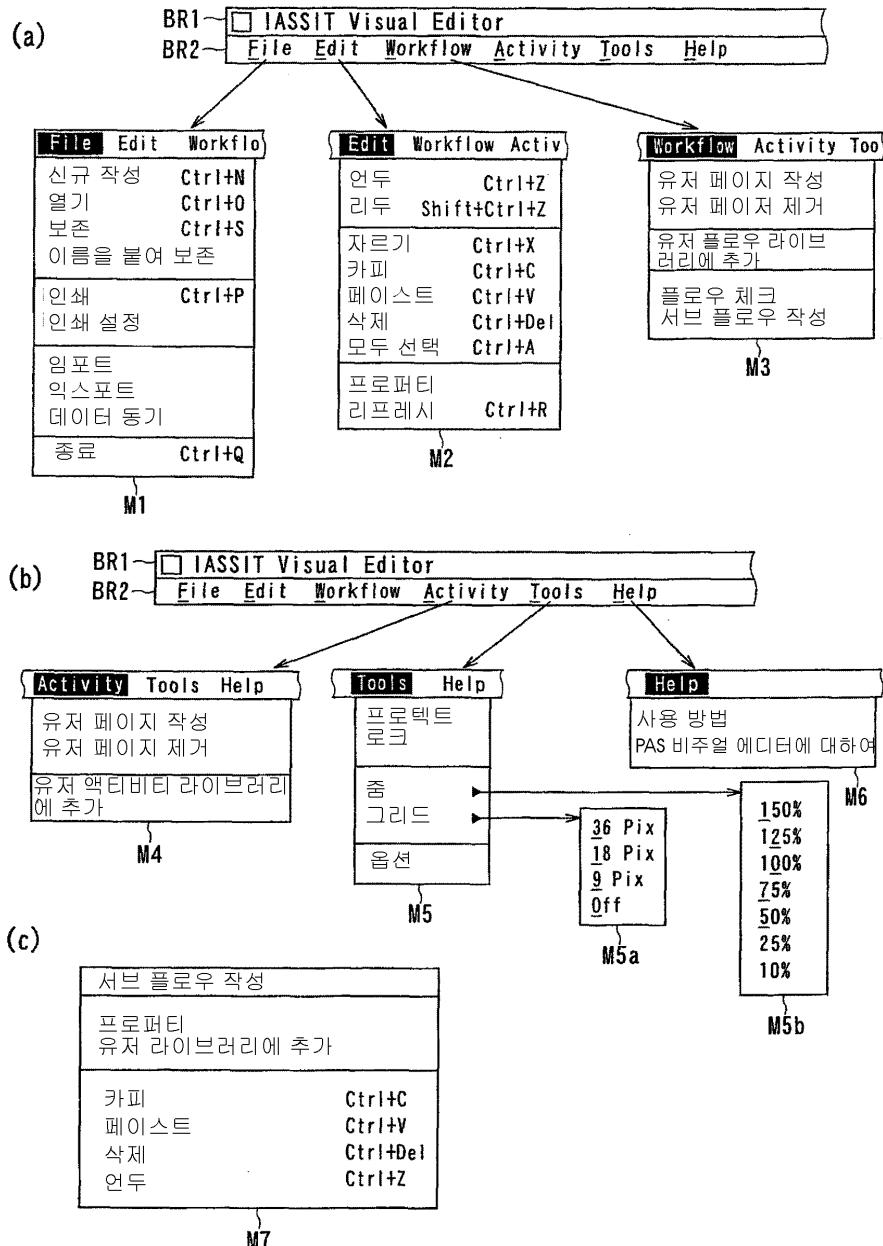


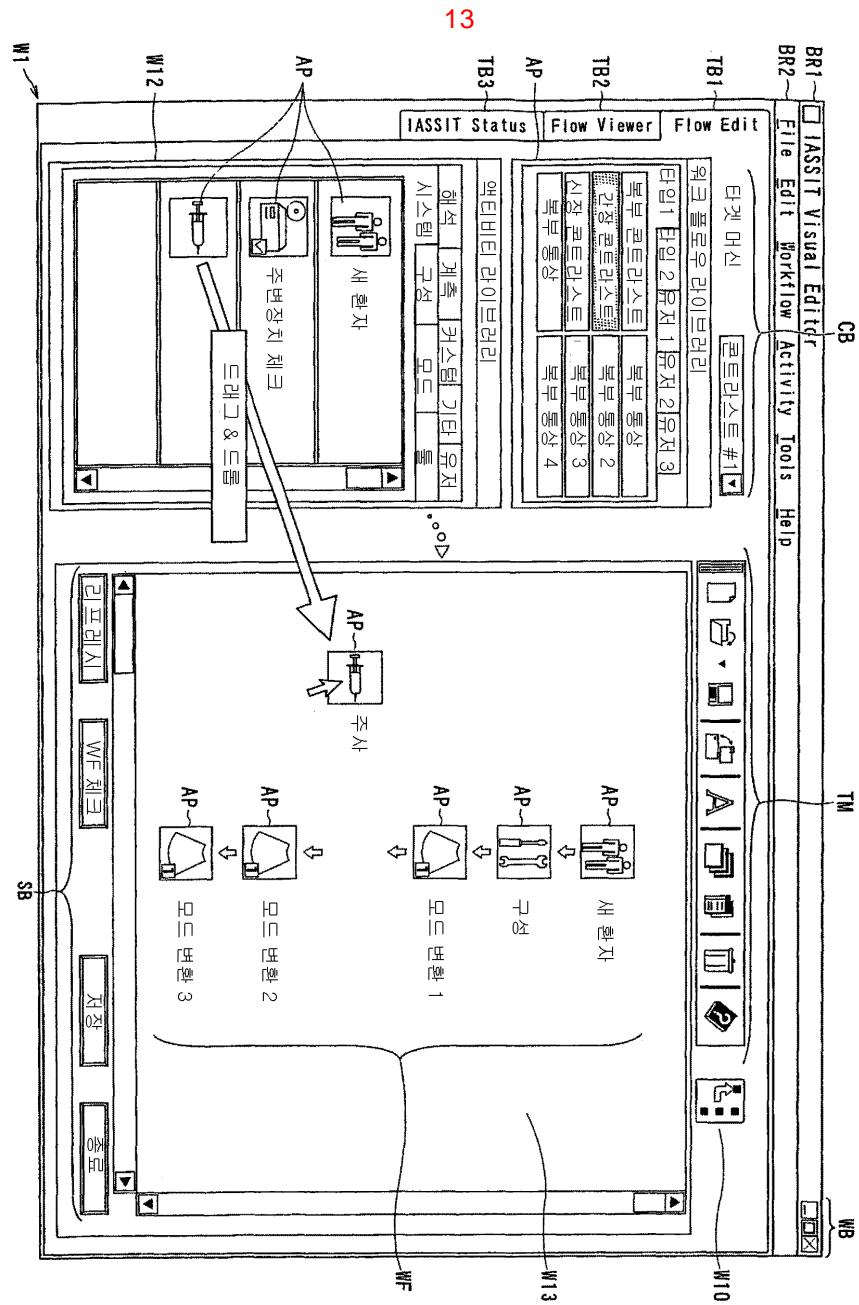
10



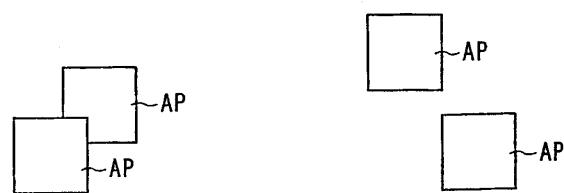
11







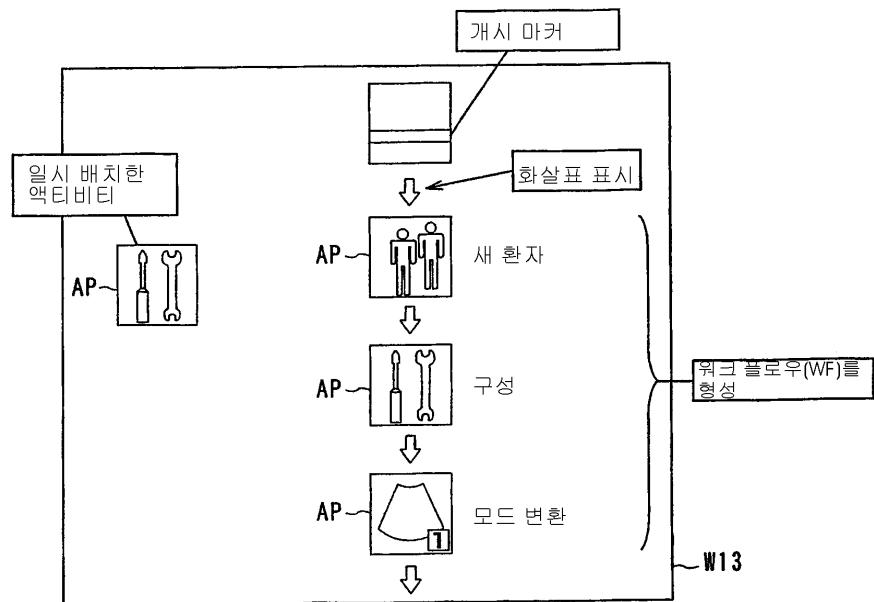
14



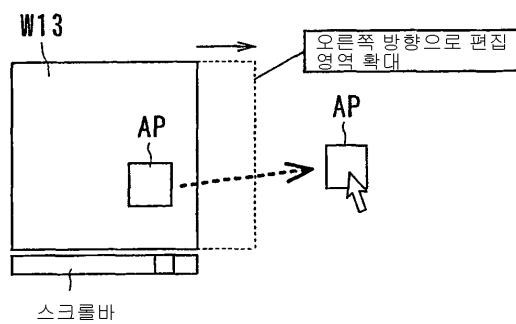
(a) (불가)

(b) (가)

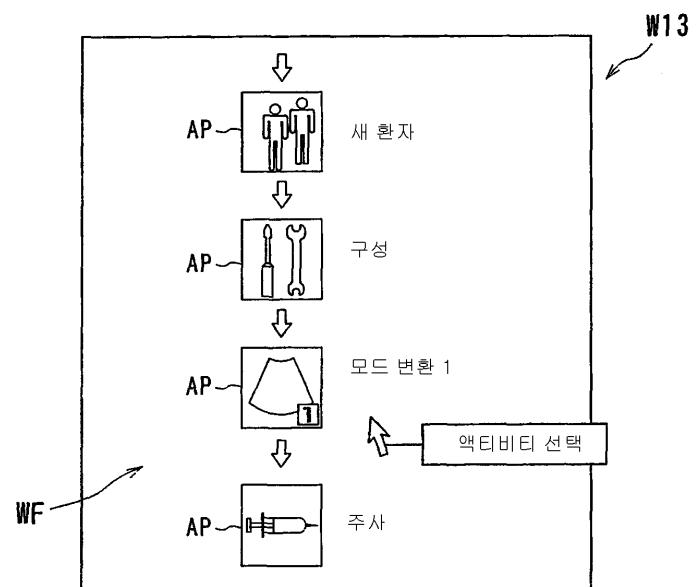
15



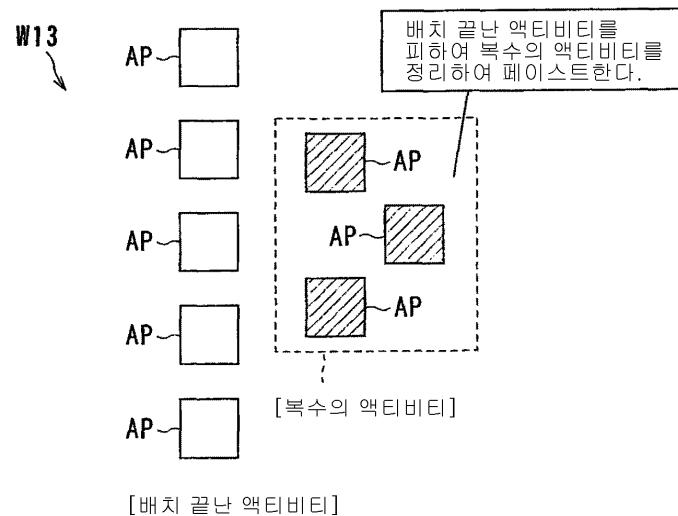
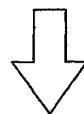
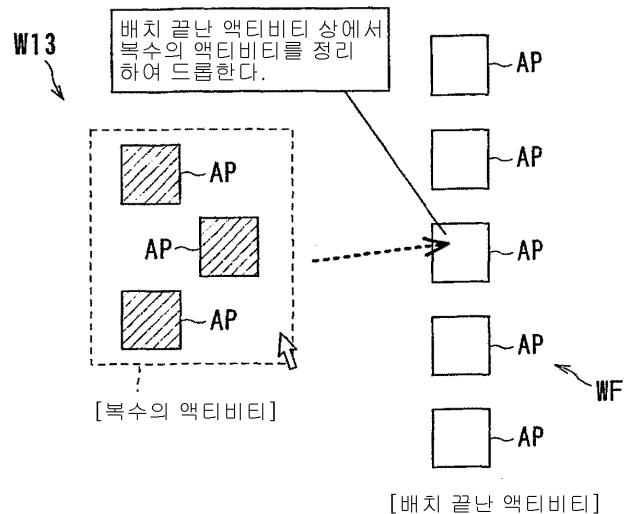
16



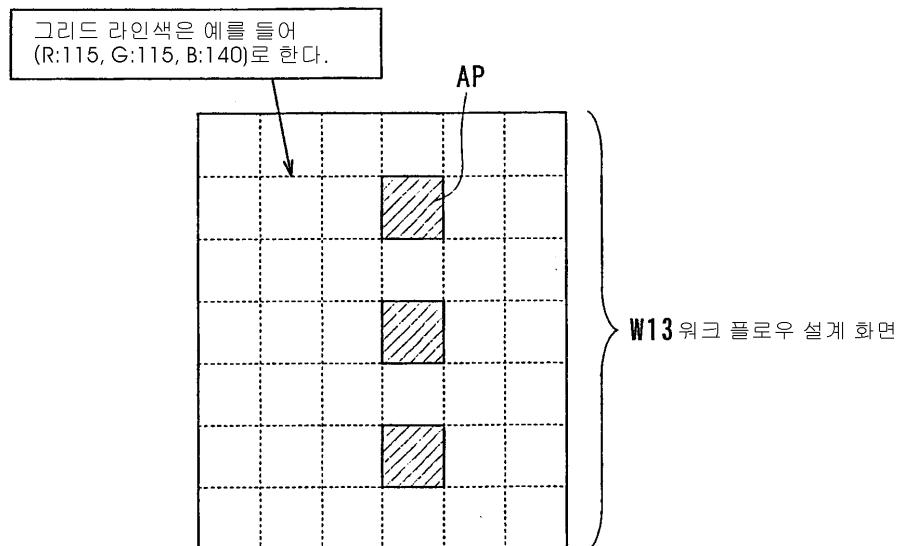
17



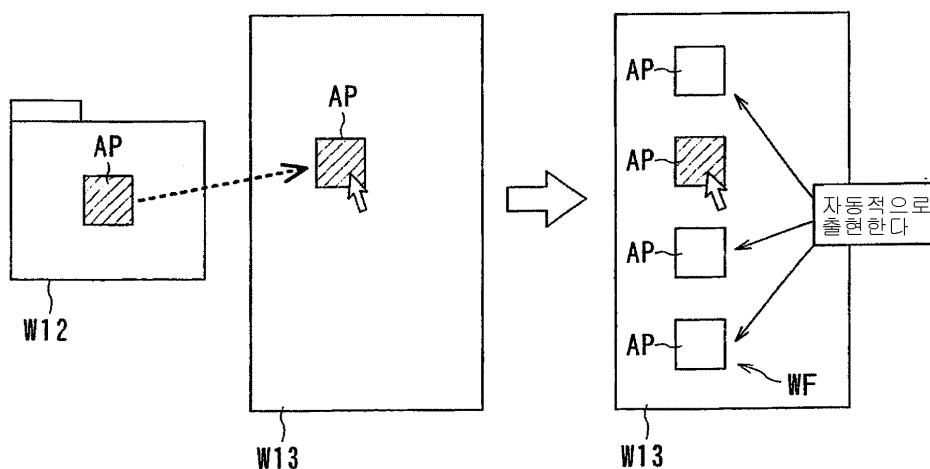
18



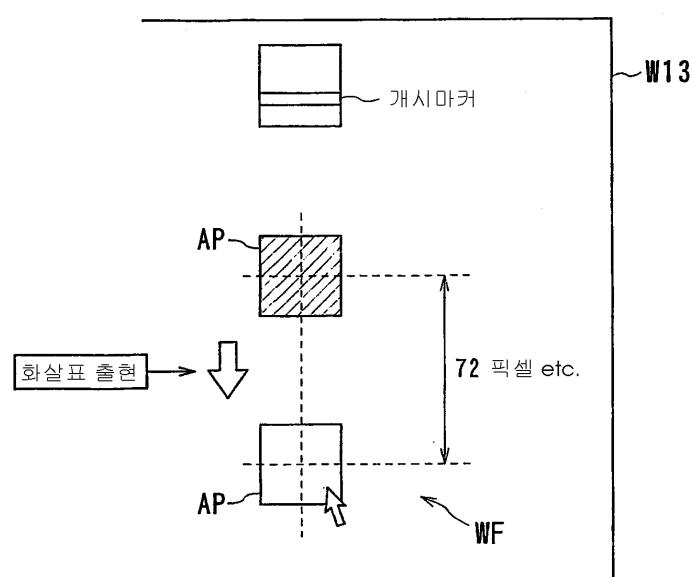
19



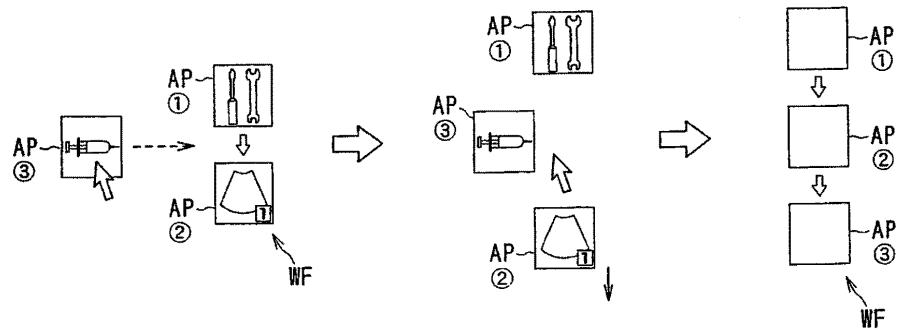
20



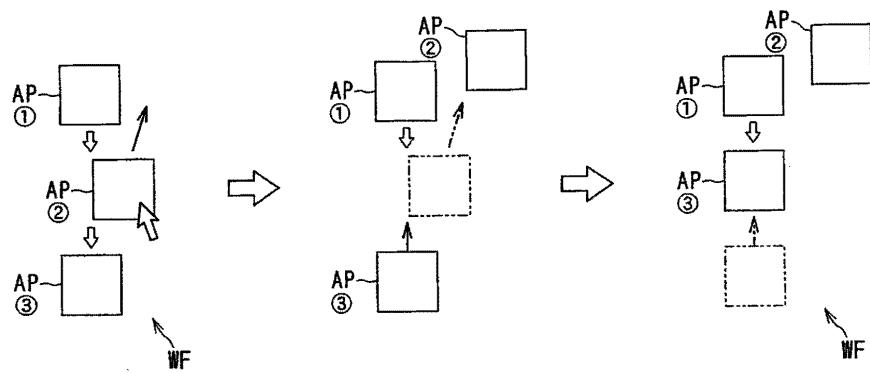
21



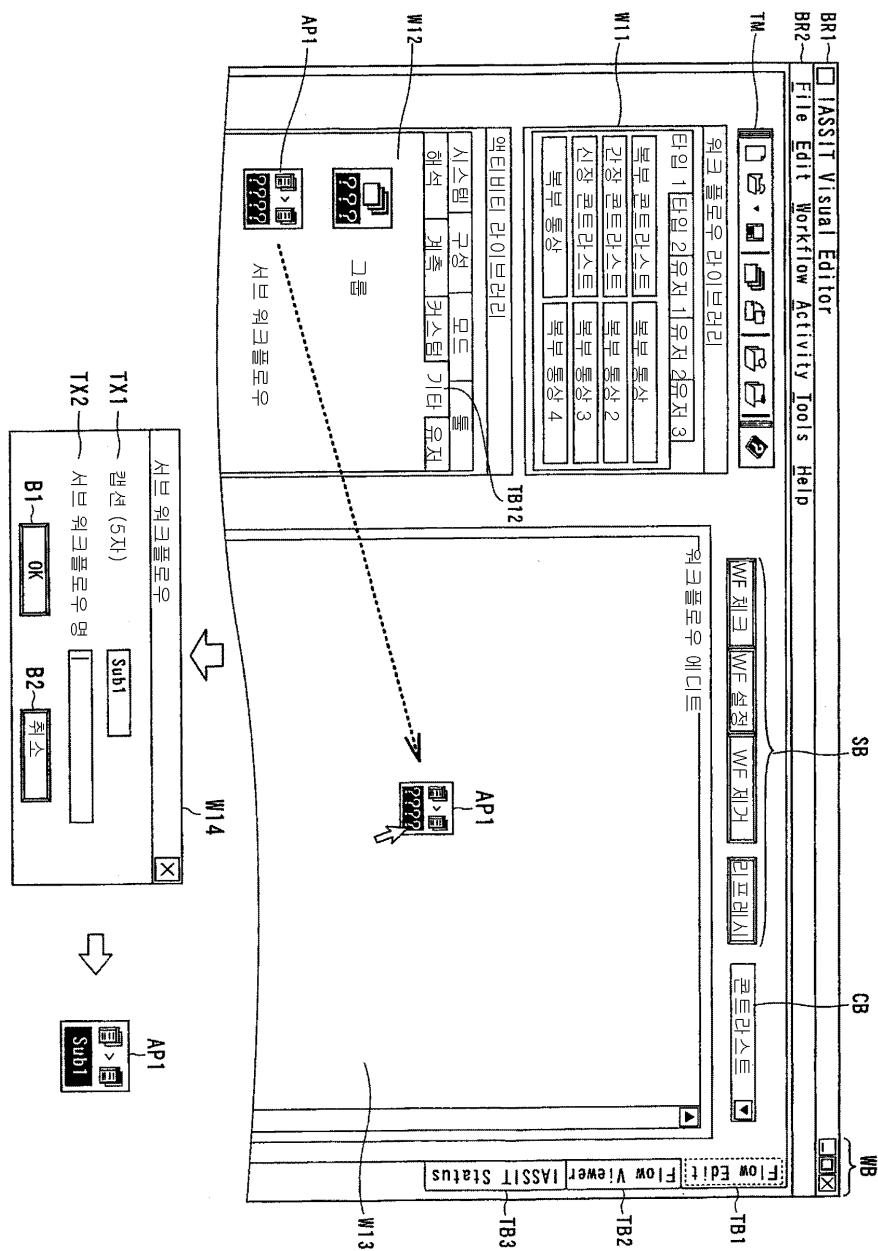
22

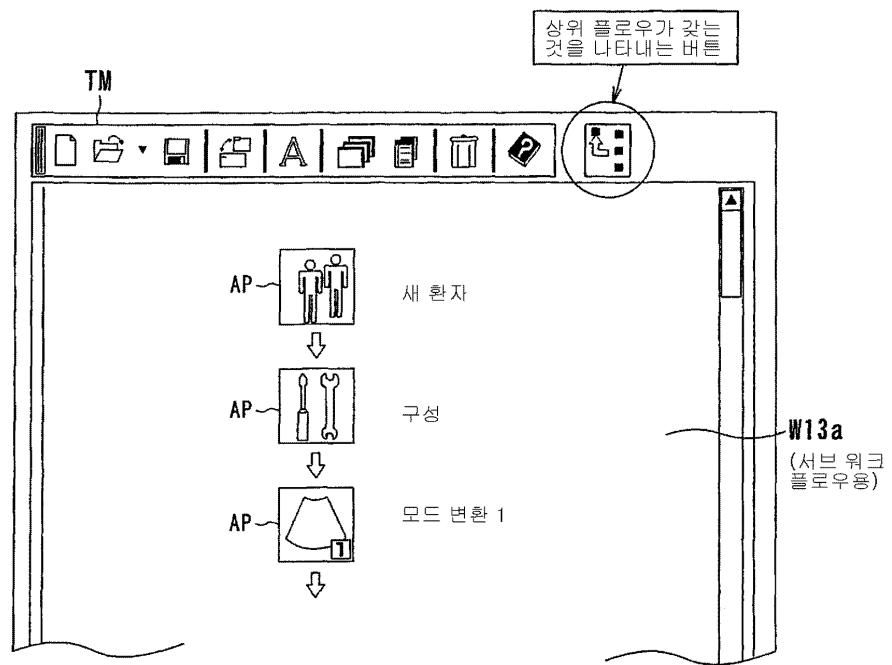


23

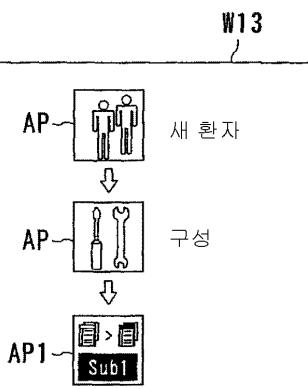
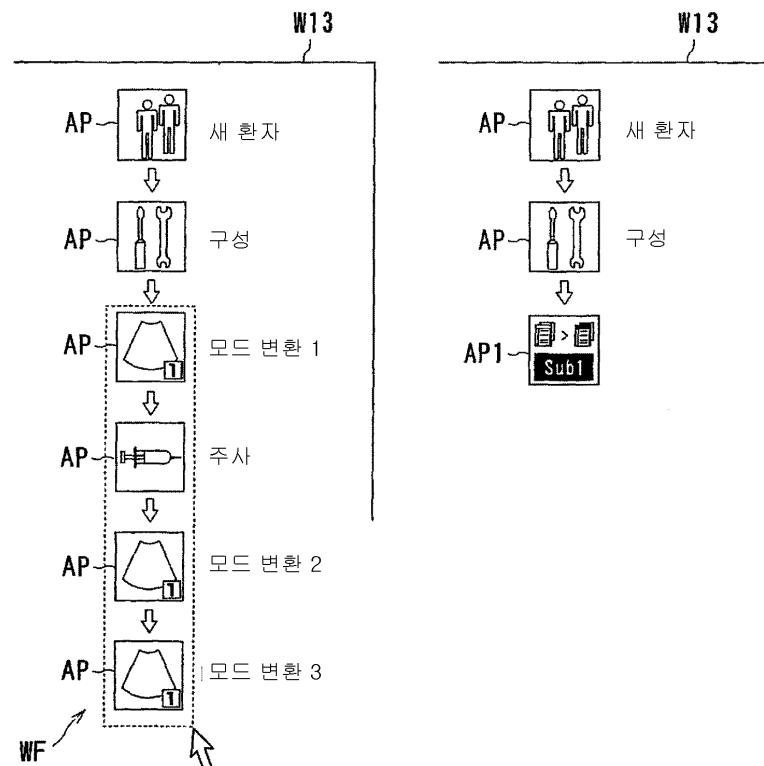


24





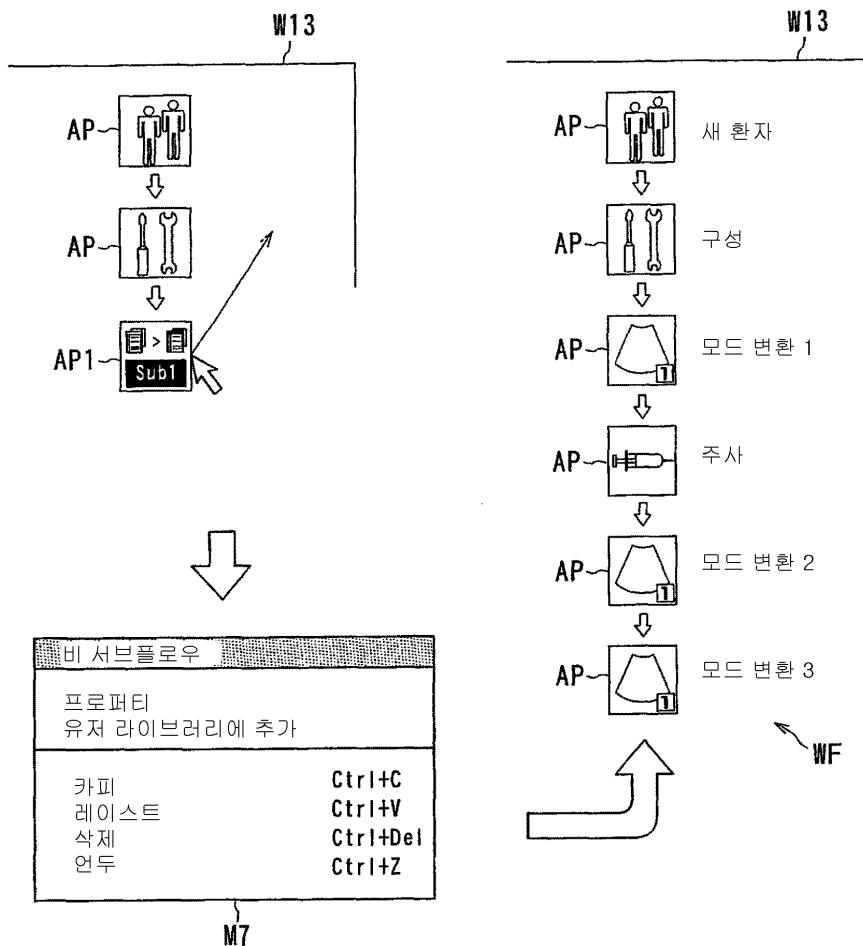
26



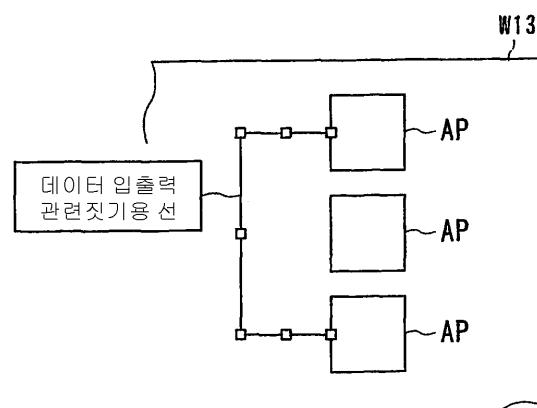
W14

서브 워크플로우	
TX1	캡션 (5자) Sub1
TX2	서브 워크플로우명 []
B1 ~ OK	
B2 ~ 취소	

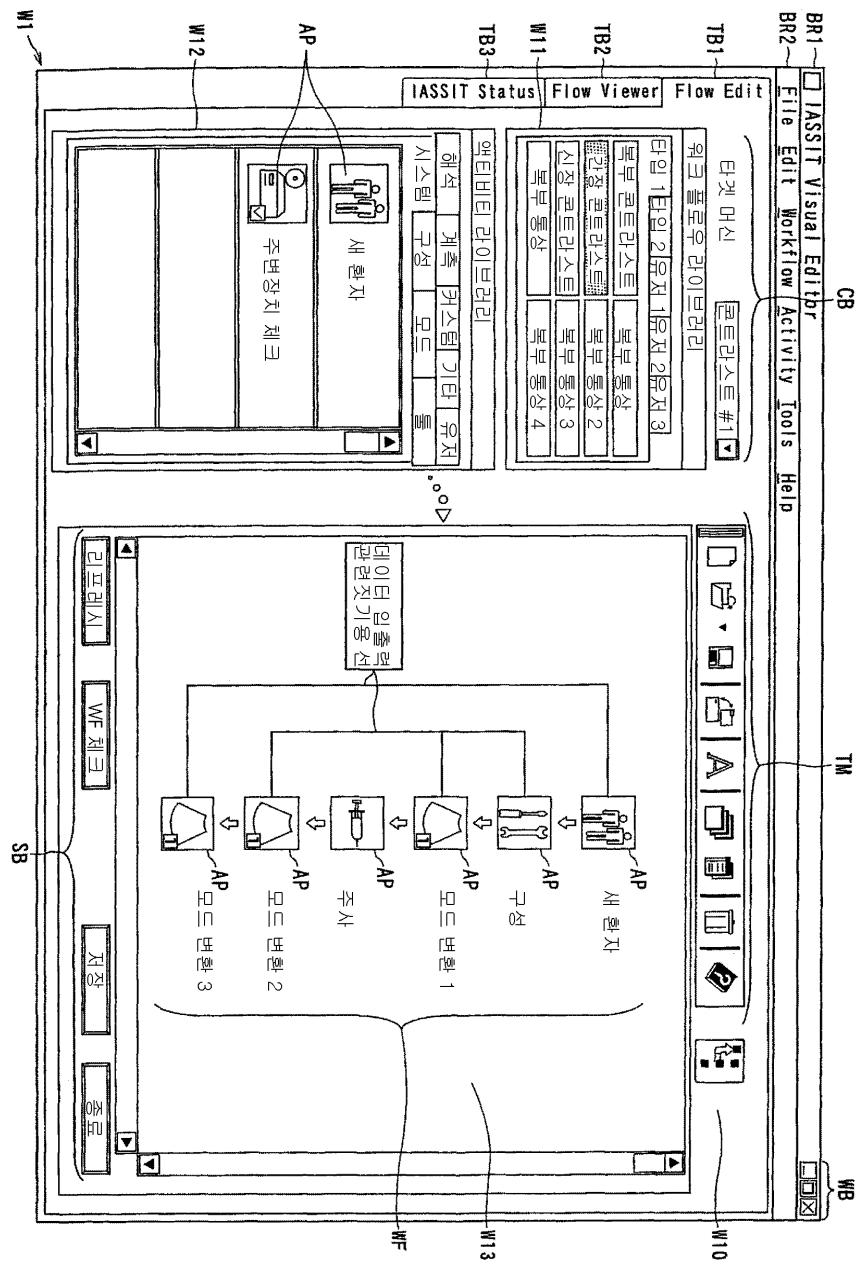
27

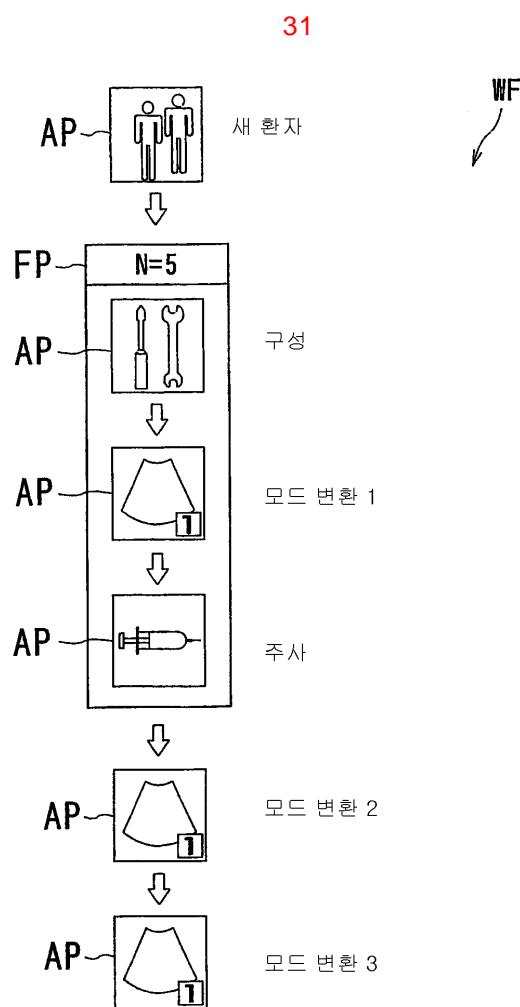
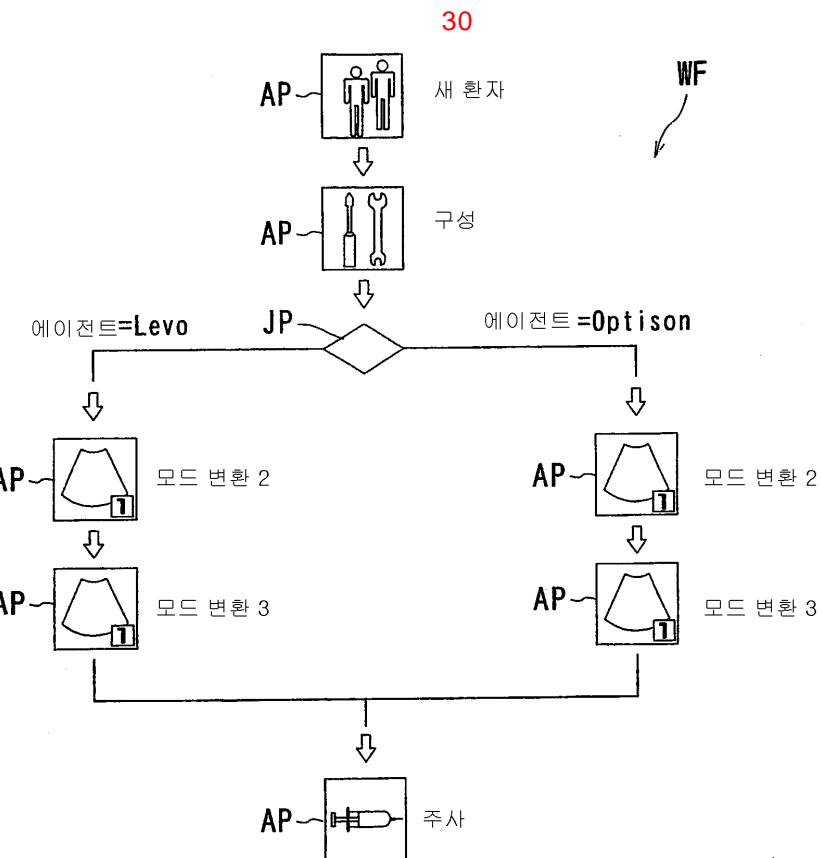


28



29

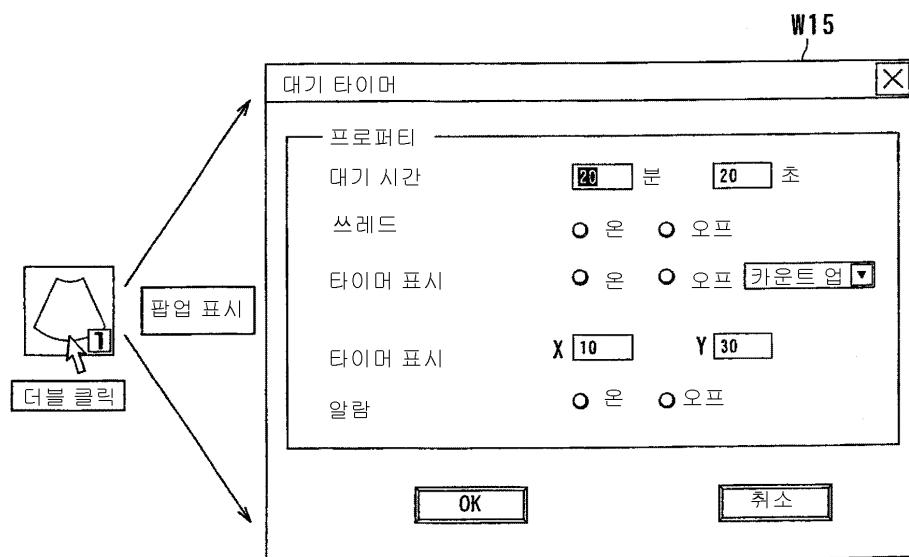




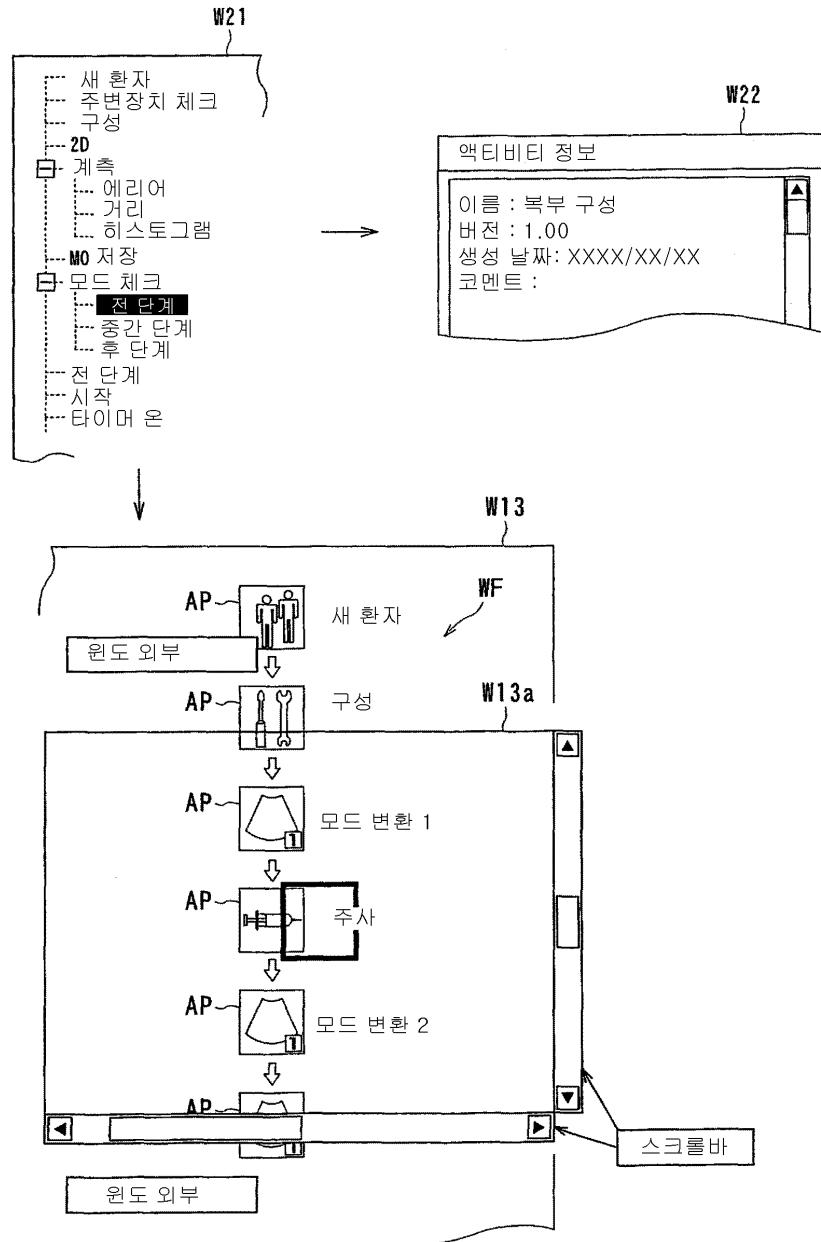
32

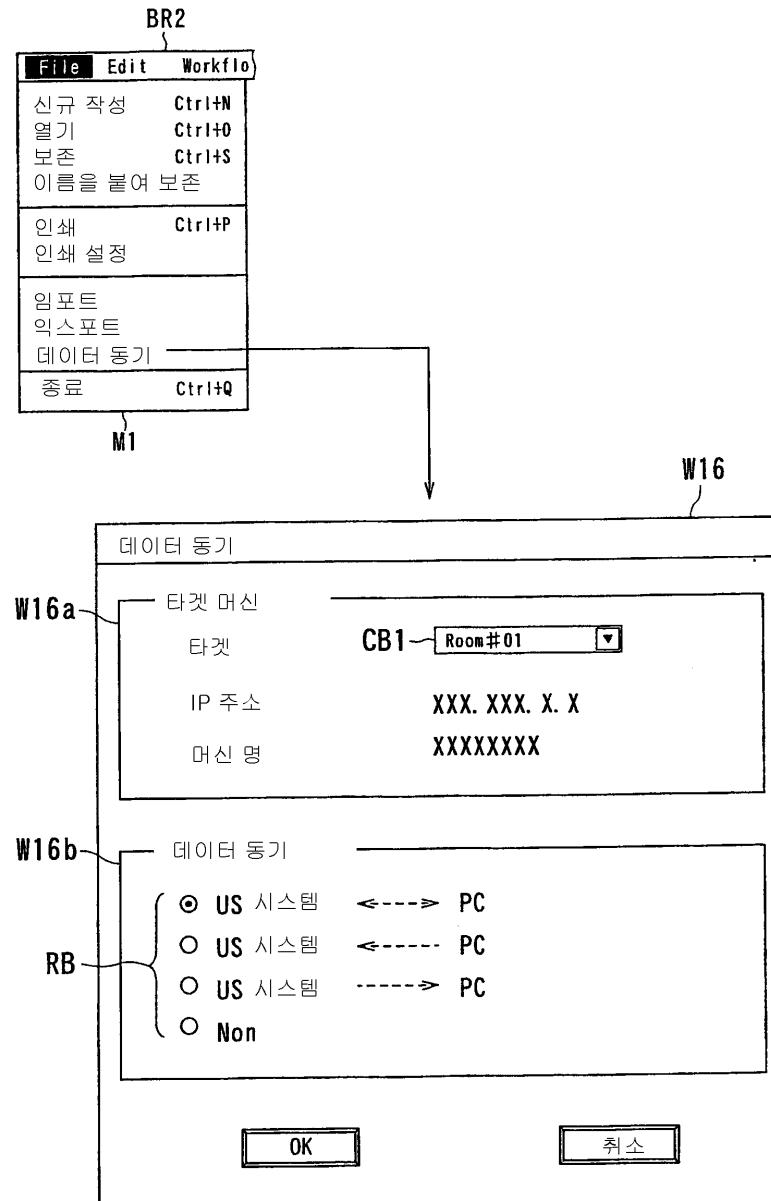
속성	설명
자동 실행	워크플로우 시스템 조작중에 유저 액션을 기다리지 않고 액티비티를 자동적으로 실행한다
매뉴얼 실행	워크플로우 시스템 조작중에 유저 액션을 기다려, 액션에 의해 액티비티를 실행한다.
스킵	워크플로우 시스템 조작중에 액티비티의 실행은 실시하지 않는다. PAS는 다음의 액티비티를 실행한다.
조건 실행	워크플로우 시스템 조작중에 액티비티가 되돌려지는 실행 스텝에 따라서 실행 또는 스킵, 건너뛰기를 실시할수 있다.

33

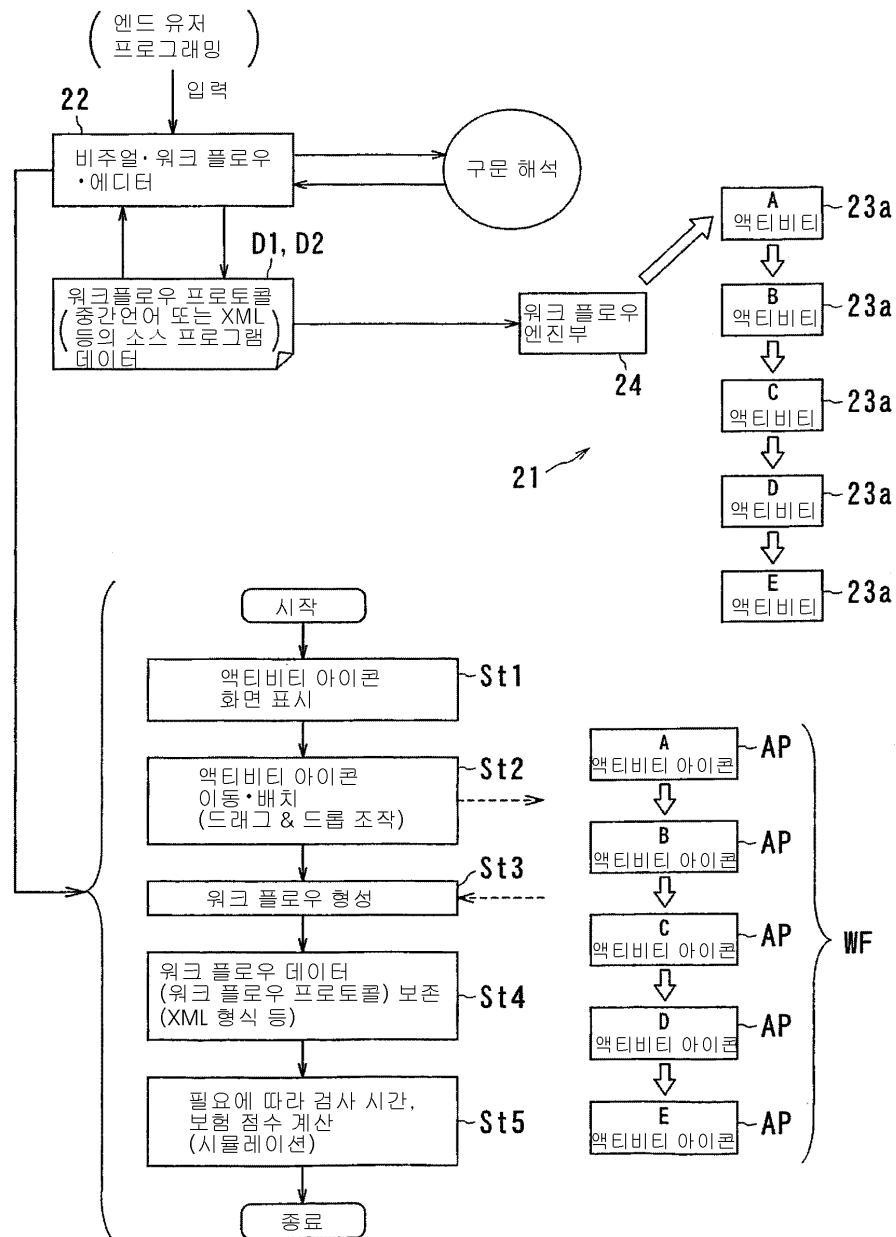


34





36



专利名称(译)	超声波诊断装置，工作流程编辑系统和超声波诊断装置的控制方法		
公开(公告)号	KR1020040066836A	公开(公告)日	2004-07-27
申请号	KR1020047007757	申请日	2001-11-22
[标]申请(专利权)人(译)	株式会社东芝		
申请(专利权)人(译)	Sikki东芝股份有限公司		
当前申请(专利权)人(译)	Sikki东芝股份有限公司		
[标]发明人	SANO AKIHIRO 사노아키히로 KAMIYAMA NAOHISA 가미야마나오히사 OGASAWARA YOICHI 오가사와라요이치		
发明人	사노아키히로 가미야마나오히사 오가사와라요이치		
IPC分类号	A61B8/06 A61B8/00		
CPC分类号	G01S7/52098 A61B8/12 A61B8/00 A61B8/06		
代理人(译)	KIM MYUNG SHIN PARK JANG KYU		
外部链接	Espacenet		

摘要(译)

超声诊断设备技术领域本发明涉及一种超声诊断设备(1)，用于向对象照射超声信号并基于来自对象的反射回波产生超声图像，其中超声诊断设备(1)用于根据预先编写的检查过程根据工作流协议控制设备的操作的工作流系统21，以及可视工作流编辑器(例如，22)。这种配置有利于工作流协议的创建并扩展工作流系统的使用机会，因此即使是诸如初学者之类的用户在超声诊断设备中具有低熟练度并且具有很少操作经验的用户也可以获得快速操作方法。并且可以更简单地操作。2

