

(19) (KR)  
(12) (B1)

(51) 。 Int. Cl. <sup>6</sup> (45) 2003 01 30  
H04M 3/40 (11) 10 - 0369696  
 (24) 2003 01 14

(21) 10 - 1999 - 0000960 (65) 1999 - 0067916  
(22) 1999 01 15 (43) 1999 08 25

(30) 09/008,124 1998 01 16 (US)

(73) 10504

(72)	10536	14
	10562	135
	06811	

(74)

(54)

(轉寫)(transcribe)

, , , e - , , ,

1

1

2

3 4

10 :

12 : 14 :

16 : , , , 18 :

20 : 22 :

24 : ASR/NLU 26 : /

28 : 30 :

32 : 34 : /

36 : 38 :

40 : 42 : /

, , / (time of day)

가

PBX( )

가

가

(Dual Tone Multi - Frequency:DTMF) (keying)  
 , DTMF (personal identification number:PIN)

가

DTMF PIN

가

(t

ag) PIN

/

, e -  
 (轉寫)(transcribe)

( )

가 가

e -

가

), 가

( , 가

가

가

/

가

e -

, e - ( LOTUS NOTES  
(mood stamps), , 가  
NOTES

e -

e -

71

가

가

가

( , )

1

가

가

( (12))

가

(10)

(14))

(10)

( 12 ) 가

(18))

( 16 )

( 18 )

(10)

1 (16)

(48)

10

8

e -

( , e - , , / ) , 1 (10)  
 ( , ) , , , , , (10) (10)  
 8)) , (10)  
 , , , , e - ,  
 (10)

(10) 2

2 , (10) (20) ,  
( 1 2 (18)) , . (14)), (20)  
/ (10) (20) (TCP/IP  
) e - , e - , (20) e -  
, (10) (10) (20) e - )

$$\begin{aligned}
 & , \quad 1 \quad 2( \quad (18) ) \quad , \quad (20) \quad \text{가} \\
 & (10) \quad , \quad (20) \quad (20) \\
 & \text{가} \\
 & , \quad (10)
 \end{aligned}$$

(20) ) ( ( . , (20) (10) ( )  
) , , , e -  
,

/ (42)

(22) / ASR/NLU (24) ASR/NLU (24) 가 . ( , ) . e - ) .

(ID) (tagger) (30) (22) 偈  
e -  
, ID (30)  
(32) ASR/NLU (24) 偈 (32),  
. (10), e - .

(36) ( , 가 ) / (e - ( , . )) (34) 가 . ) , 가 ASR/NLU

(38) / (20), (22), / (26), ASR/NLU (24),  
(10) (34), (28) 가 . ,  
GUI( ), 가 . , (38)

, (10) PC GUI ,  
(10)  
, GUI (10) . , GUI ,  
GUI (10) .  
(10)  
, (10) 2

2, 3, 4 . 2 . (20) .  
, e - , , / , . (20) ( .  
, e -  
100). (20) , , , (20) , (handshake) (20) .  
(20) 가 (10) (10) .  
e - , , (110). (10) .  
e -

(20) , (40) ( )  
("DAT") (40) (40)  
,  
( 2 ) ( 116) / (42) ( 11  
4). 1989 (S. Furui, Dekker) "Digital Signal Processing, Synthesis and Recognition  
n" / (42)

, , (10) , , (20)  
 (22) ,  
 (120). (match)  
 (130) , (10) (152).  
 (10)

, ( , 1 ) 가  
 (22) ASR/NLU (26) , ASR/NLU (26)  
 , ( 140 ). , (10)  
 ( 152 ).

(10)  
 22) (20) , (prompt)  
 " ( 150 ), " ( 120 ).  
 (20) (36) , (10)

(22)  
 (28) 가 . , (22)  
 (10) ( 152 ). , ( 154 ), , (38)  
 (12) , , ( 1 2 (18)) ,  
 , , ( 1 2 (16)) ,

(22) , 가 (10)  
 (22) 가 (10) , (10) , , ,  
 (10) , (10) , (10) / (初面)  
 , (10) ( ) , (address book) ( 10 )  
 ) ,

, (10) , ( , ) , (10)  
 ) (IVR ) , ( , ) , (10)  
 3 ) (22) ASR/NLU (24) , ( 11  
 8 ).

(22)

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08/788,471

08/871,784  
(text - prompted)

, 4 , ( (10) , ( , e - ) ASR/NLU (24) , ( ( 190),  
가 ), ( e - ) ( 194). e - , ASR/NLU (24) , ( , AS  
( 192), ( ) 가 , ( , AS  
(OCR) , ( , AS  
CII ).

, , , ASR/NLU (24)  
( 200) , ( 210). , ( 21  
0), , , ( 222). ,  
( 224).

, (10) , ( , ( , ASR/NLU (24)  
) ( 196), e -

, (10) / , (12)  
e - , e - , (20) ASR/  
NLU (24) , (24) , (e -  
, ASR/NLU (24) , ( , ,  
가 , ( , ASCII )  
(OCR) ASR/NLU (24) , ( , ASCII )

ASR/NLU (24) ( 3 160) ( 4 e -  
200)

ASR/NLU ( 3 170) ( 4 220) , ASR/NLU  
 (24) (28) , ( 3 158)  
 ( 4 228) . ,  
 , (28)

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(10) 가 . , 가 (10)  
(10) 가

(20) ASR/NLU (24) 가  
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 593,032  
 ( ) (10), ASR/NLU (24) ASR  
 ( , )  
 NLU "Bob"  
 ASR/NLU (24) NLU  
 (10) "

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 keyword spotting 가

, , (10)  
(IVR) (order taking) (dialog - based form filling)  
(10) . , . , . , . , . , .  
(10)

(10) (10) 가가  
가 (10) , (enrollment)  
(PIN) , (20)

DTMF (10) PIN . (10)  
(10) 가

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(IBM Docket Number YO997 - 313) , , (biometric)  
가 가 ( (20) ) ( ,  
, 가 )

(10) GUI , , (10) , , (10) , , (10) , , , , ,  
) (38) . , , (10) , , (10) , , 8 12  
, , , / , , 2  
, , (38) (10) . , (22), ASR/NLU (24),  
, / (26), (20), (34), (28) , (28)  
(10) , .

```

graph LR
    DTMF1[DTMF] --> Central[Central]
    GUI1[GUI] --> Central
    Central --> PIN[PIN]
    Central --> Output[Output]
    PIN --> Output
    
```

The diagram illustrates a system architecture. It starts with two input components: 'DTMF' and 'GUI'. Both of these feed into a central processing unit. The central unit then outputs to two separate components: 'PIN' and 'Output'. The 'PIN' component further connects to the 'Output' component.

, ASR/NLU (24) (35) (10)  
, (38) " 가"



GUI , PIN DTMF / (34)  
가 . , (10) / (34) /  
ASR/NLU (34) (24) / (34) , "Mr. Smith" (34) Mr. Smith ASR/NLU (24) ASR  
/NLU (24) , ASR/NLU (24) (20) (34) e - (20) ,

가  
, (10)  
, (10)  
가  
, (10)  
(beeper)  
(  
)  
(, )  
가  
, (10)  
가  
가

, (10) (10), (ANI ) ,  
e - e - e -  
(10) 가 가  
가 , , ,  
(10) (10)

, (10) 가 (10) . . . . .  
, (10) . . . . .  
, (10) . . . . .  
, (10) . . . . .  
가 , (10) . . . . .  
가 , (10) . . . . .

가 . (10)

가 e -  
e - 가 . /

, 가 , 가

(57)

1.

(incoming call)

가

가

가 , 가

2.

1 ,

3.

2 ,

4.

5.

6.

7.

1 ,

가 ,

8.

9.

10.

11.

1 ,

12.

13.

1 ,

,

14.

15.

16.

1 ,

, (address book)

17.

18.

1 ,

,

19.

1 ,

(prompt)

20.

21.

22.

1

, , ,

(transcribe) ,

가 , ,

23.

22

,

. . . . .

24.

22

,

, , , ,

가 , ,

25.

22

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. . . . .

가 , ,

26.

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40.

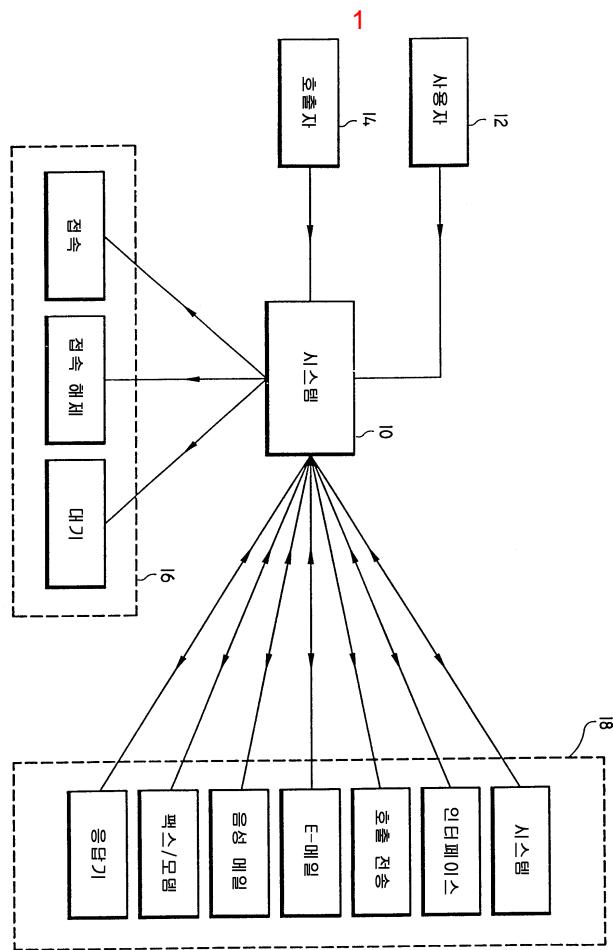
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41.

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