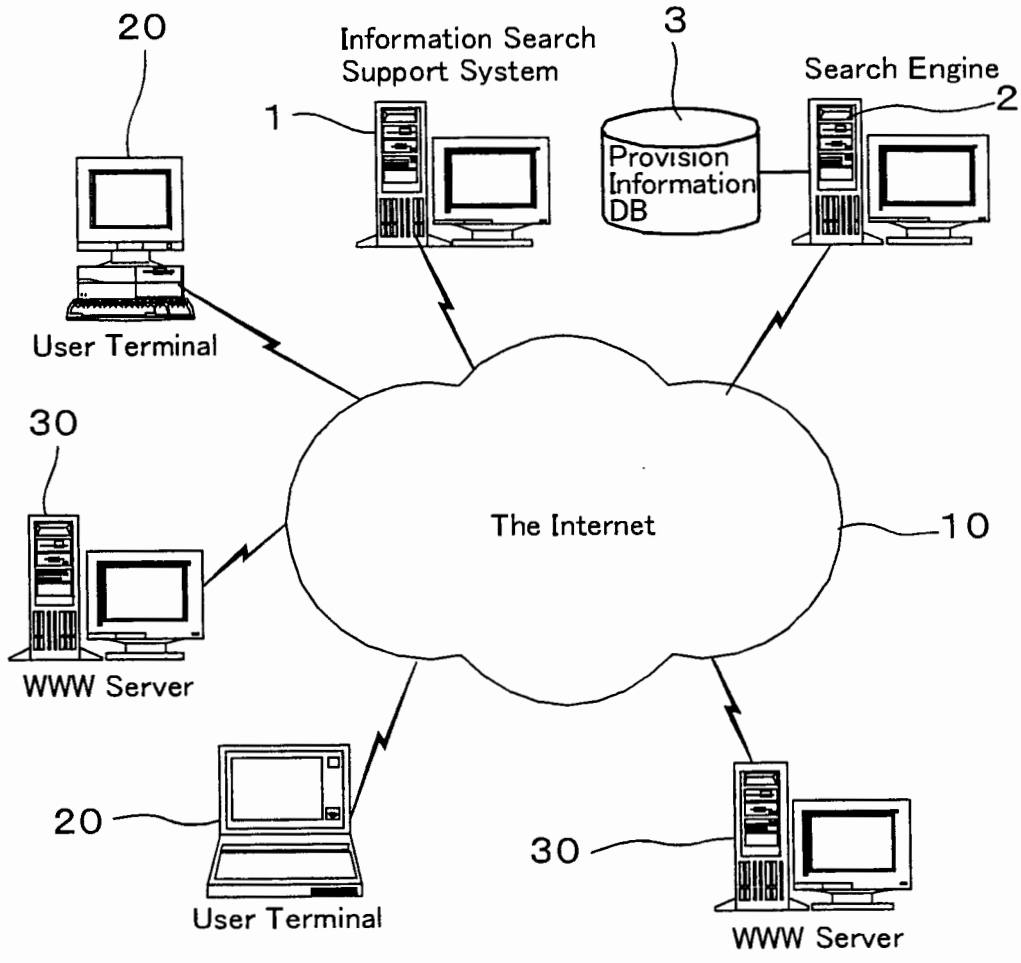

20
Information Search
Support System
3
Search Engine
1
2
Provision
Information
DB
User Terminal
30
The Internet
10
WWW Server
20
30
User Terminal
WWW Server

Fig. 1

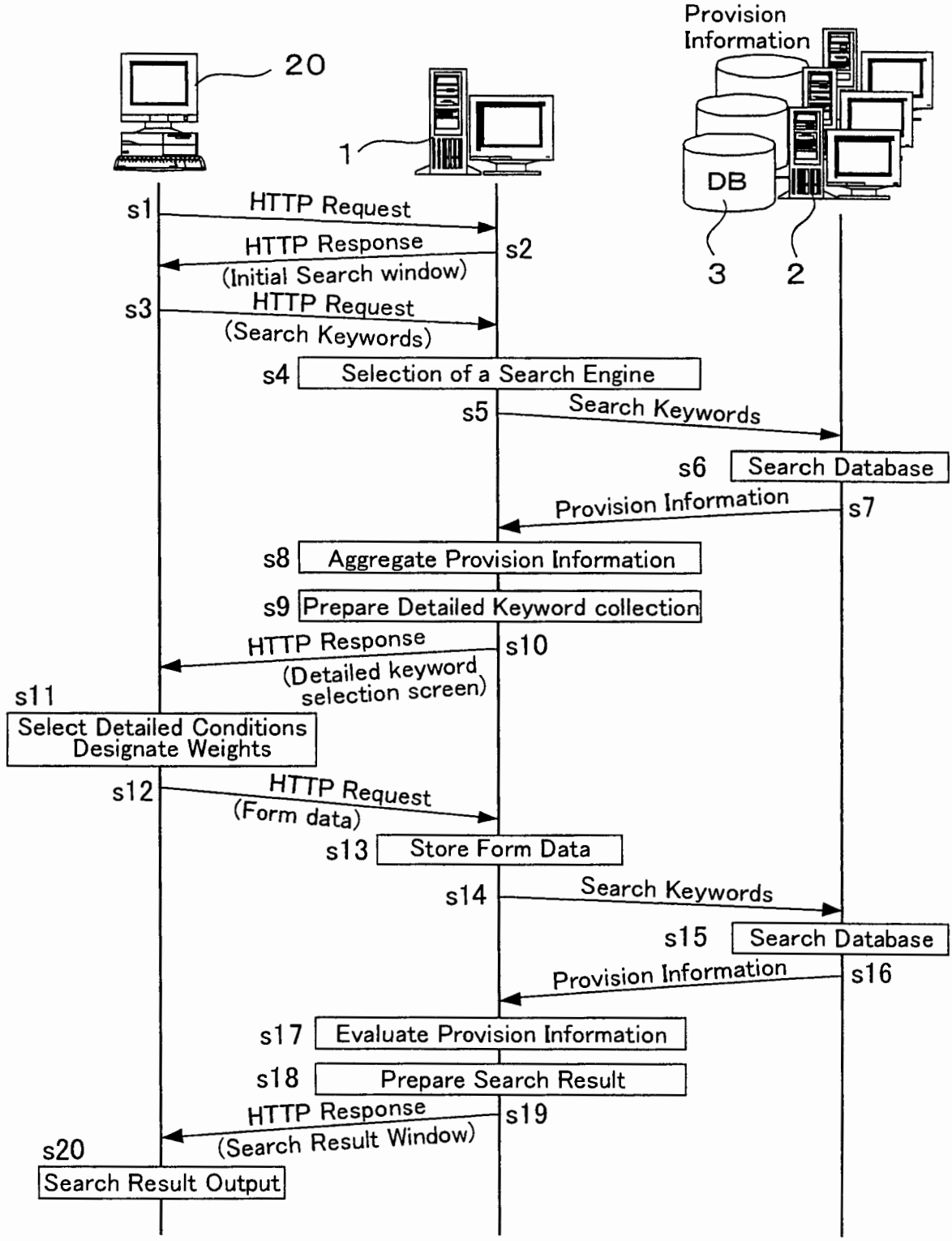

Provision Information
20
1
DB
3
2
s1
HTTP Request
HTTP Response
(Initial Search window)
s2
s3
HTTP Request
(Search Keywords)
s4
Selection of a Search Engine
s5
Search Keywords
s6
Search Database
Provision Information
s7
s8
Aggregate Provision Information
s9
Prepare Detailed Keyword collection
HTTP Response
(Detailed keyword selection screen)
s10
s11
Select Detailed Conditions
Designate Weights
s12
HTTP Request
(Form data)
s13
Store Form Data
s14
Search Keywords
s15
Search Database
Provision Information
s16
s17
Evaluate Provision Information
s18
Prepare Search Result
HTTP Response
(Search Result Window)
s19
s20
Search Result Output

Fig.2

Search Keywords	Search Engine Name	Location (URL)
TV, Video, DVD	ABC	www.abc.co.jp
Air Ticket, Airplane	DEF	www.def.co.jp
Hotel, Lodge	GHI	www.ghi.co.jp
TV, Washing machine	XYZ	www.xyz.co.jp
.....	.....	.....

Fig.3

Search Keyword	Television, electric appliance shop, Company A			
Category	Requirements	Detailed Information	Detailed Condition	Detailed Description Page
Product	Maker	Company A		www.info-1.co.jp
Product	Size	36-inches		www.info-2.co.jp
Product	Model Number	ABCD-1234	¥100,000	www.info-3.co.jp
Function	Tuner	Available		www.info-4.co.jp
Function	Video	Available		www.info-5.co.jp
Service	Installation service	Available	Free	www.info-6.co.jp
Service	Disposal service	Available	¥10,000	www.info-7.co.jp
Payment	Payment Method	Transfer into Account	Advance payment	www.info-8.co.jp
Payment	Payment Method	Paym ent on delivery		www.info-9.co.jp
Budget	Total Price	¥80,000～150,000		www.info-10.co.jp

Fig.4

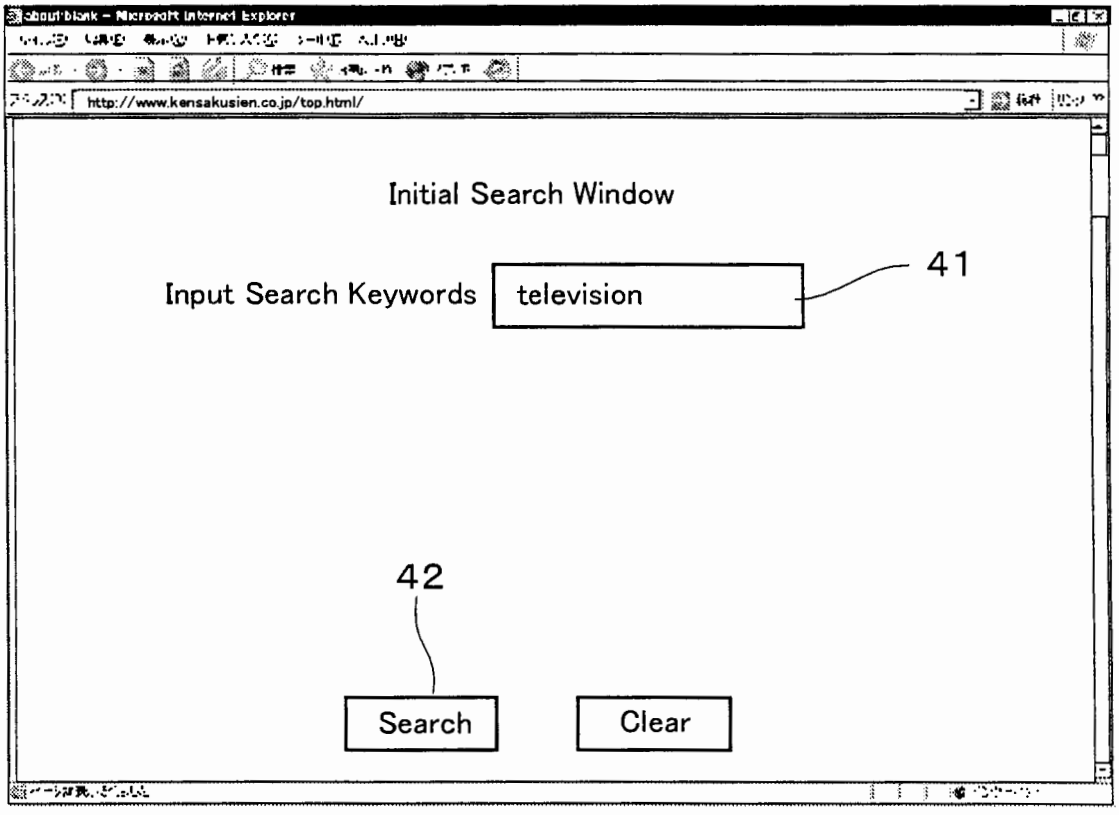

http://www.kensakusien.co.jp/top.html/
Initial Search Window
Input Search Keywords
television
41
42
Search
Clear

Fig.5

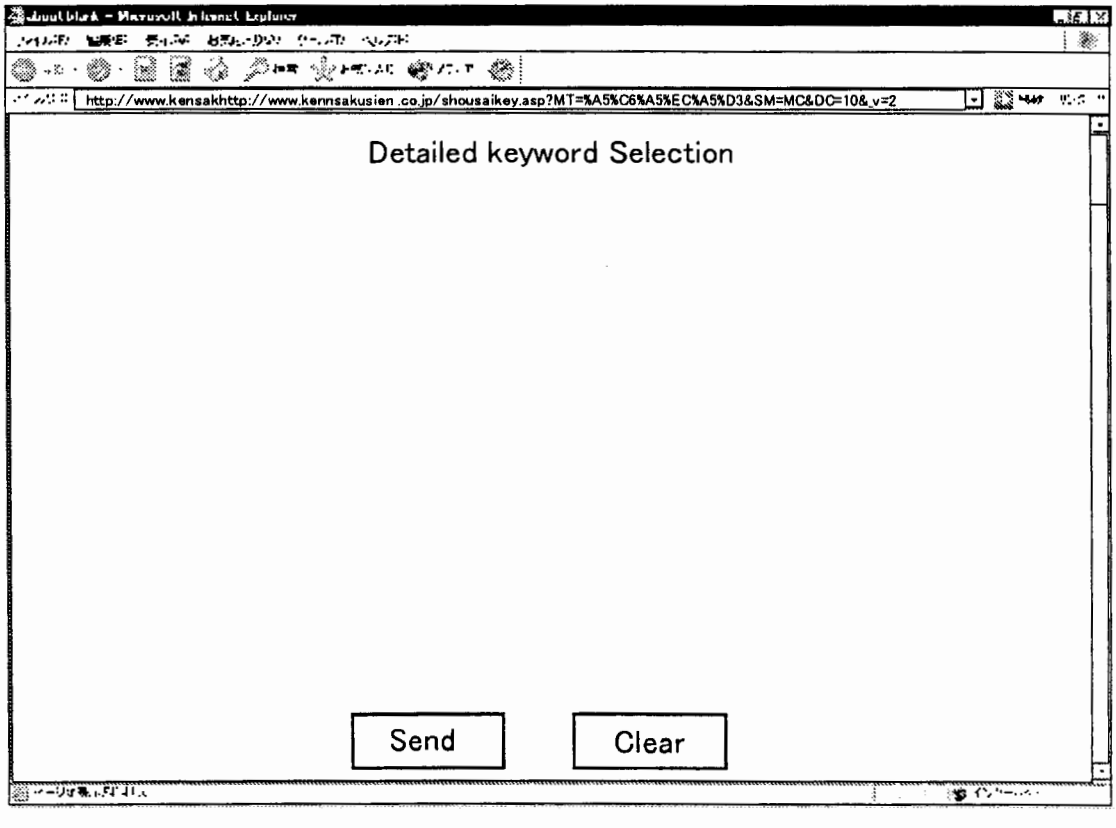

http://www.kensakhttp://www.kennsakusien .co.jp/shousaikey.asp?MT=%A5%C6%A5%EC%A5%D3&SM=MC&DC=10&_v=2
Detailed keyword Selection
Send
Clear

Fig.6

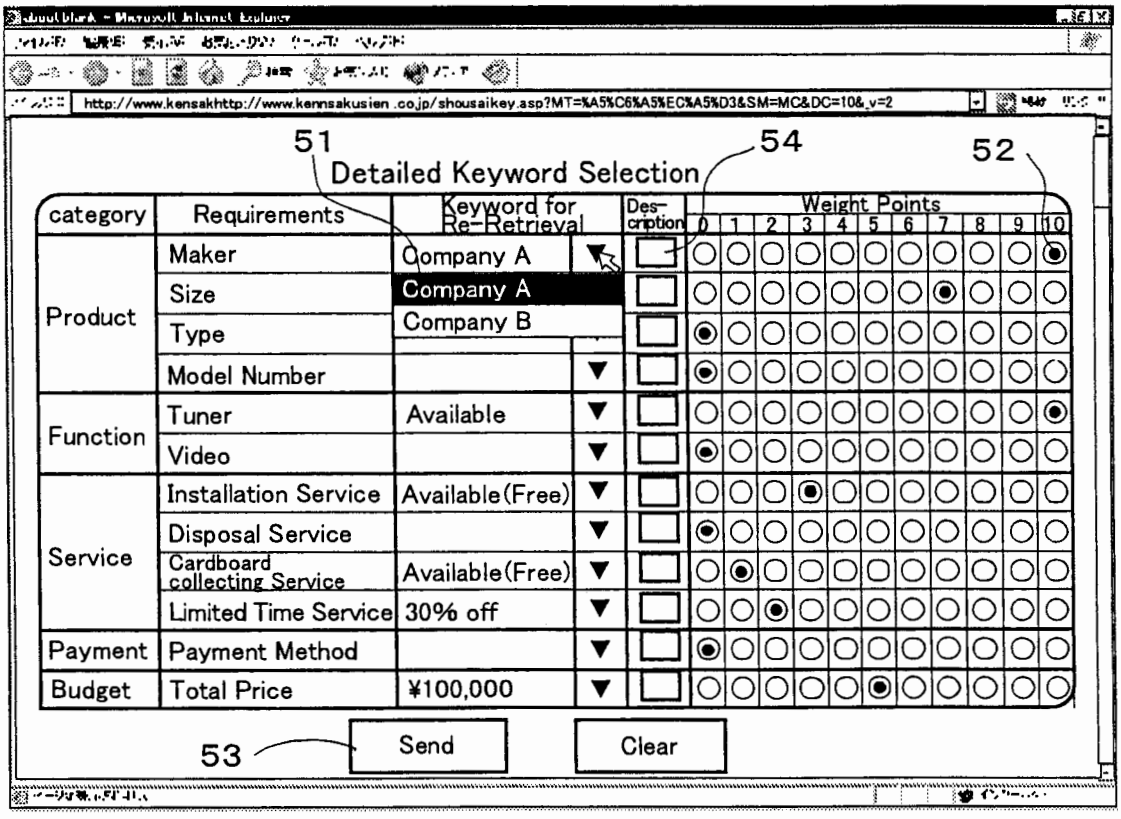

http://www.kensakhttp://www.kennsakusien .co.jp/shousaikey.asp?MT=%A5%C6%A5%EC%A5%D3&SM=MC&DC=10&_v=2
51
Detailed Keyword Selection
54
52
category
Requirements
Keyword for Re-Retrieval
Des-cription
Weight Points
0 1 2 3 4 5 6 7 8 9 10
Product
Maker
Company A
Size
Company A
Company B
Type
Model Number
Function
Tuner
Available
Video
Service
Installation Service
Available(Free)
Disposal Service
Cardboard collecting Service
Available(Free)
Limited Time Service
30% off
Payment
Payment Method
Budget
Total Price
¥100,000
53
Send
Clear

Fig.7

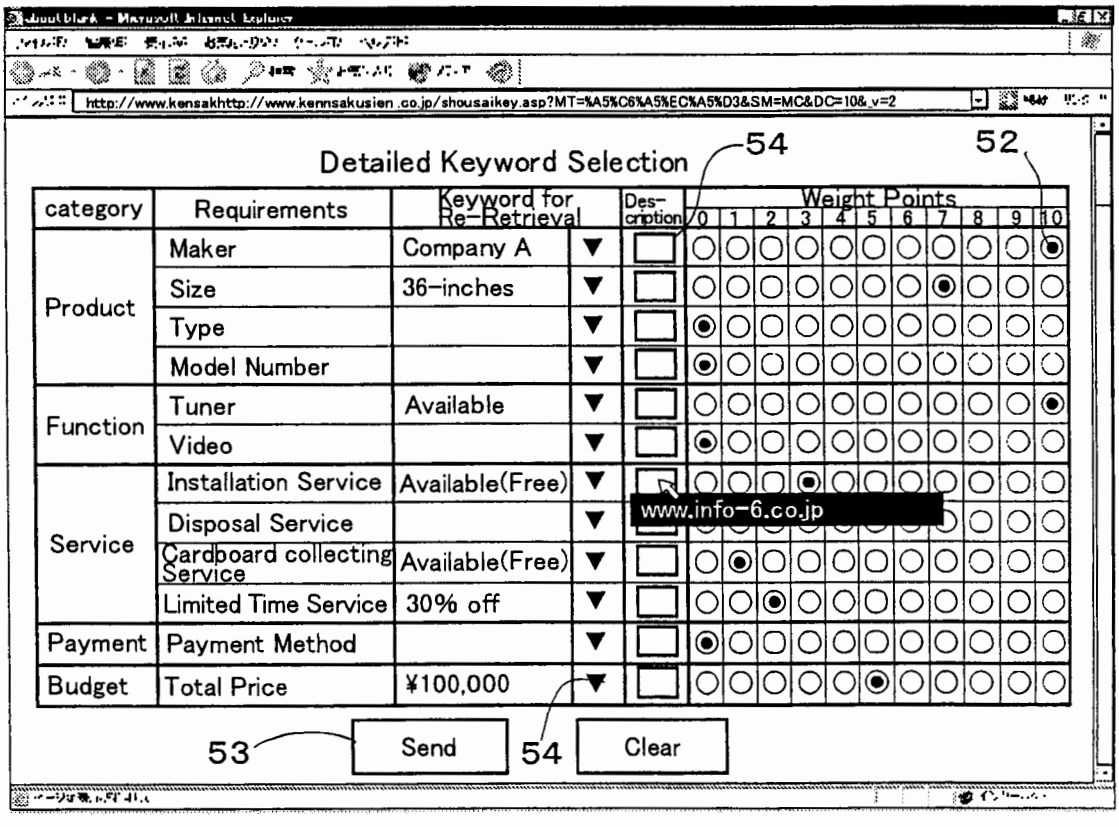

http://www.kensakhttp://www.kennsakusien .co.jp/shousaikey.asp?MT=%A5%C6%A5%EC%A5%D3&SM=MC&DC=10&_v=2
Detailed Keyword Selection
54
52
category
Requirements
Keyword for Re-Retrieval
Des-cription
Weight Points
0 1 2 3 4 5 6 7 8 9 10
Product
Maker
Company A
Size
36-inches
Type
Model Number
Function
Tuner
Available
Video
Service
Installation Service
Available(Free)
www.info-6.co.jp
Disposal Service
Cardboard collecting Service
Available(Free)
Limited Time Service
30% off
Payment
Payment Method
Budget
Total Price
¥100,000
53
Send
54
Clear

Fig.8

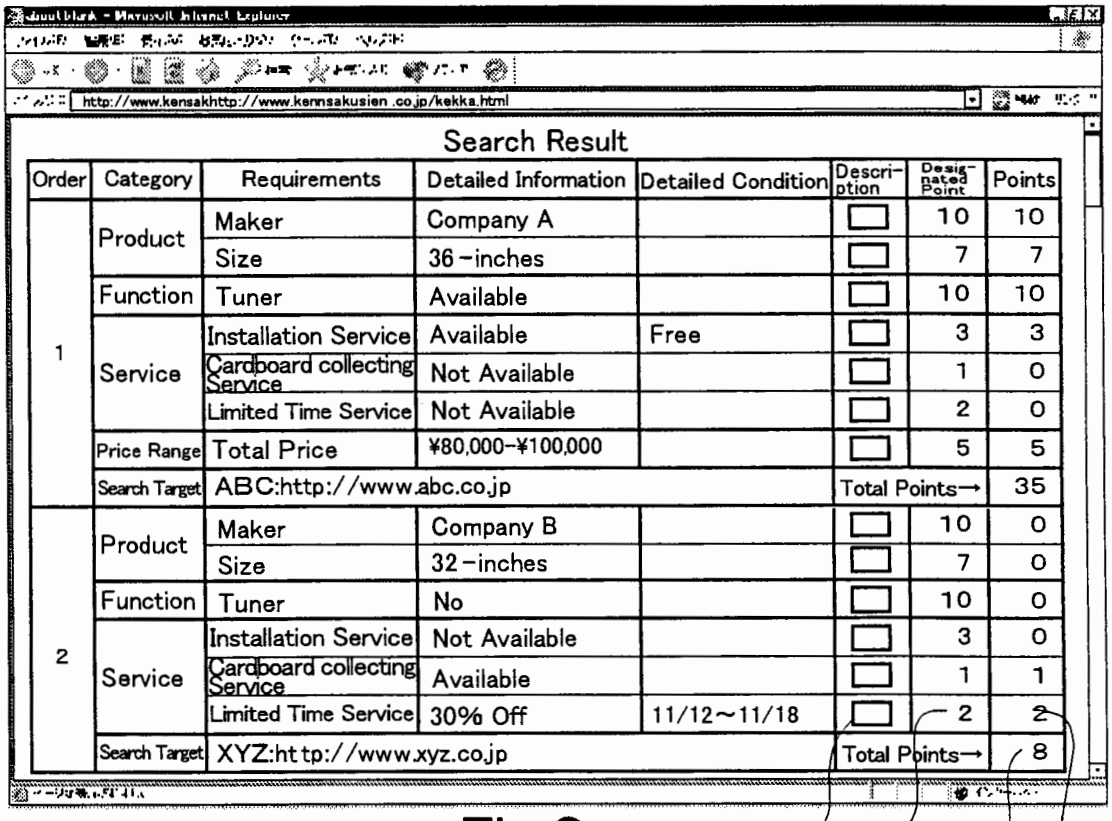


Fig.9

Category	Requirements	Detailed Information	Detailed Condition	Detailed Description Page
Product	Maker	Company A		www.info-1.co.jp
		Company B		www.info-A.co.jp
	Size	36-inches		www.info-2.co.jp
		32-inches		www.info-B.co.jp
	Type	Plasma		www.info-C.co.jp
	Model Number	ABCD-1234	¥100,000	www.info-3.co.jp
		EFGH-5678	¥80,000	www.info-D.co.jp
	.....	.....	.....	.....
Function	Tuner	Available		www.info-4.co.jp
	Video	Available		www.info-5.co.jp
	.....	.....	.....	.....
Service	Installation service	Available	Free	www.info-6.co.jp
	Disposal Service	Available	¥10,000	www.info-7.co.jp
			¥15,000	www.info-F.co.jp
	Cardboard collecting Service	Available	Free	www.info-E.co.jp
	Limited Time Service	30% Off	11/12-UNTIL 11/18	www.info-G.co.jp
	.....	.....	.....	.....
Payment	Payment Method	Transfer into Account	Advance Payment	www.info-8.co.jp
		Payment on delivery		www.info-9.co.jp
		Card	Debit, CompanyA, Company B	www.info-H.co.jp
		Cash		www.info-I.co.jp
	.....	.....	.....	.....
Budget	Total Price	¥80,000~150,000		www.info-10.co.jp
		¥50,000~¥100,000		www.info-j.co.jp

Fig.10

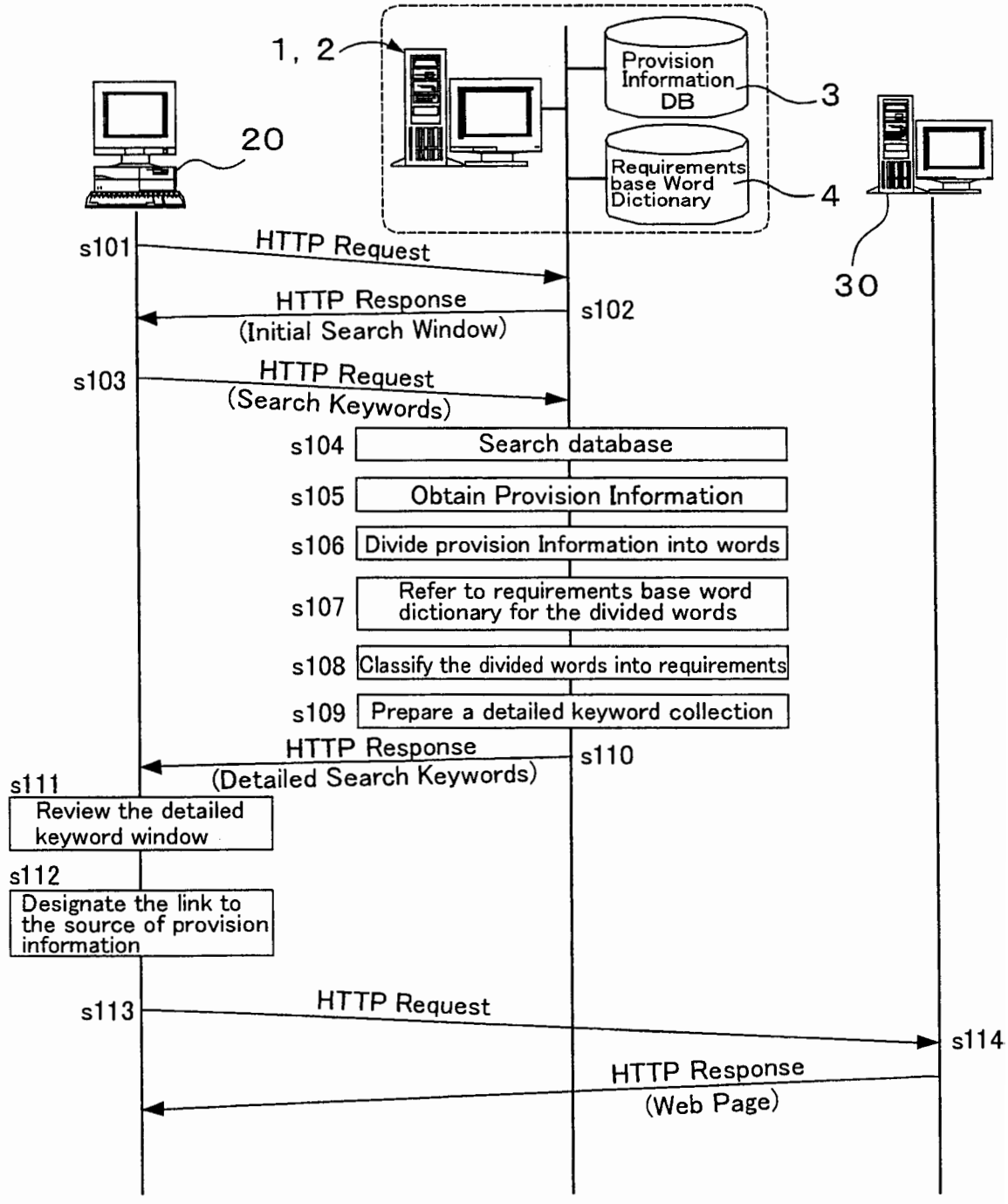

1, 2
Provision Information DB
3
Requirements base Word Dictionary
4
20
30
s101
HTTP Request
HTTP Response
(Initial Search Window)
s102
s103
HTTP Request
(Search Keywords)
s104
Search database
s105
Obtain Provision Information
s106
Divide provision Information into words
s107
Refer to requirements base word dictionary for the divided words
s108
Classify the divided words into requirements
s109
Prepare a detailed keyword collection
HTTP Response
s110
(Detailed Search Keywords)
s111
Review the detailed keyword window
s112
Designate the link to the source of provision information
s113
HTTP Request
s114
HTTP Response
(Web Page)

Fig.11

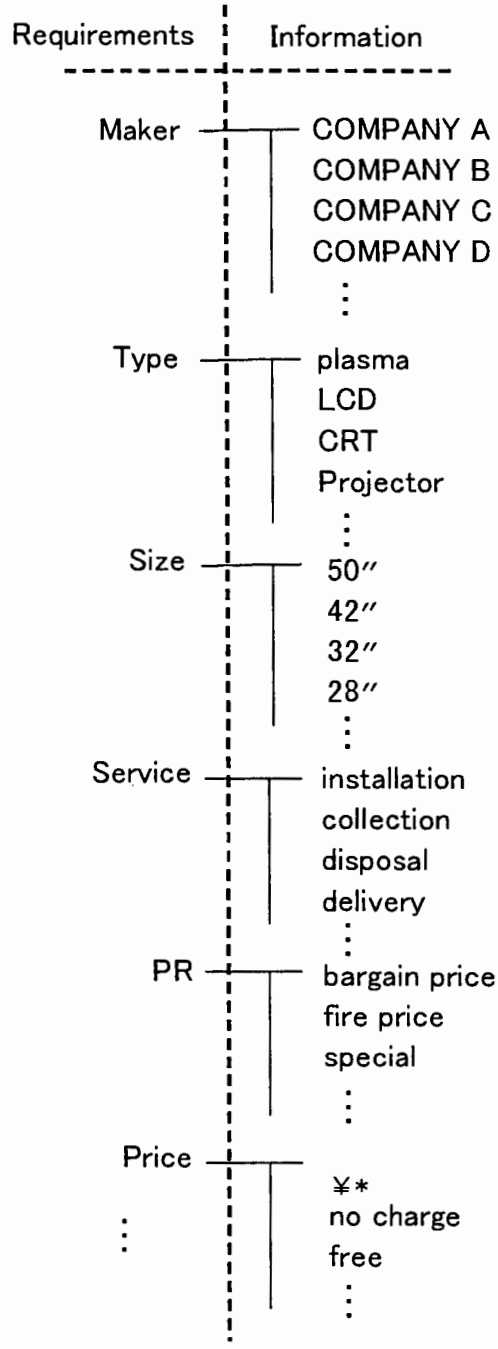

Requirements
Information
Maker
COMPANY A
COMPANY B
COMPANY C
COMPANY D
Type
plasma
LCD
CRT
Projector
Size
50″
42″
32″
28″
Service
installation
collection
disposal
delivery
PR
bargain price
fire price
special
Price
¥*
no charge
free

Fig.12

URL→http://www.abc.co.jp

A's 50″ plasma TV
ABCD－1234
Bargain Price:
￥800,000
Now, get free Installation service

Fig.13

Word
Company A
50″
plasma
TV
ABCD－1234
bargain
￥800,000
now
free
installation
get

Fig.14

Requirements	Word	Provision Information	
		URL	Contents
Maker	Company A	http://www.abc.co.jp	Company A's 50″ Plasma TV...
Size	50″	http://www.abc.co.jp	Company A's 50″ Plasma TV...
Type	plasma	http://www.abc.co.jp	Company A's 50″ Plasma TV ABCD...
AV Instrument	TV	http://www.abc.co.jp	Company A's 50″ Plasma TV ABCD...
Model	ABCD−1234	http://www.abc.co.jp	Plasma TV ABCD−1234 Bargain Price:...
PR	bargain	http://www.abc.co.jp	ABCD−1234 Bargain Price ¥800,000 Now
Price	¥800,000	http://www.abc.co.jp	Bargain Price ¥800,000 Now, get free...
Time Limit	now	http://www.abc.co.jp	¥800,000 Now, get free installation
Price	free	http://www.abc.co.jp	Now, get free installation service.
Service	installation	http://www.abc.co.jp	Now, get free installation service.
Others	get	http://www.abc.co.jp	Now, get free installation service.

Fig.15

Requirements	Word	Provision Information	
		URL	Contents
Maker	company A	http://www.abc.co.jp	Company A's 50″ Plasma TV...
		http://www.def.co.jp	Company A's new 50″ Plasma TV...
	company B	http://www.ghi.co.jp	Get Company B's 42″ TV by lottery...
	company C	http://www.jkl.co.jp	Summer campaign, Company C's 32″ TV
Size	50″	http://www.abc.co.jp	Company A's 50″ Plasma TV...
		http://www.def.co.jp	Company A's new 50″ Plasma TV...
	42″	http://www.ghi.co.jp	Get Company B's 42″ TV by lottery...
	32″	http://www.jkl.co.jp	Summer campaign, Company C's 32″ TV
Model Number	ABCD-1234	http://www.abc.co.jp	Plasma TV ABCD1234 at a bargain...
	EFGH-5678	http://www.def.co.jp	Maker: Company B Model:EFGH-5678...
	WXYZ-9999	http://www.ghi.co.jp	32″ LCD TV WXYZ9999...
Type	plasma	http://www.abc.co.jp	Company A's 50″ Plasma TV...
		http://www.def.co.jp	Company A's new 50 Plasma TV...
		http://www.ghi.co.jp	Please watch sports on Plasma TV...
		http://www.jkl.co.jp	Also when purchasing a Plasma TV...
	LCD	http://www.ghi.co.jp	Company C's 32″ LCD TV is...
Price	¥800,000	http://www.abc.co.jp	Bargain Price ¥800,000 Now get free...
	¥600,000	http://www.ghi.co.jp	Price: ¥600,000
	¥500,000	http://www.jkl.co.jp	Special Price: ¥500,000, now..
Service	installation	http://www.abc.co.jp	Now, get free installation service.
	collection	http://www.ghi.co.jp	We collect cardboard..
	disposal	http://www.jkl.co.jp	We discard with a fee.
	delivery	http://www.jkl.co.jp	We deliver for no charge.
⋮	⋮	⋮	⋮
Others	hot	http://www.ghi.co.jp	How are things with you, this hot summer?
	summer	http://www.jkl.co.jp	How are things with you, this hot summer?
	you	http://www.jkl.co.jp	How are things with you, this hot summer?
	⋮	⋮	⋮

Fig.16

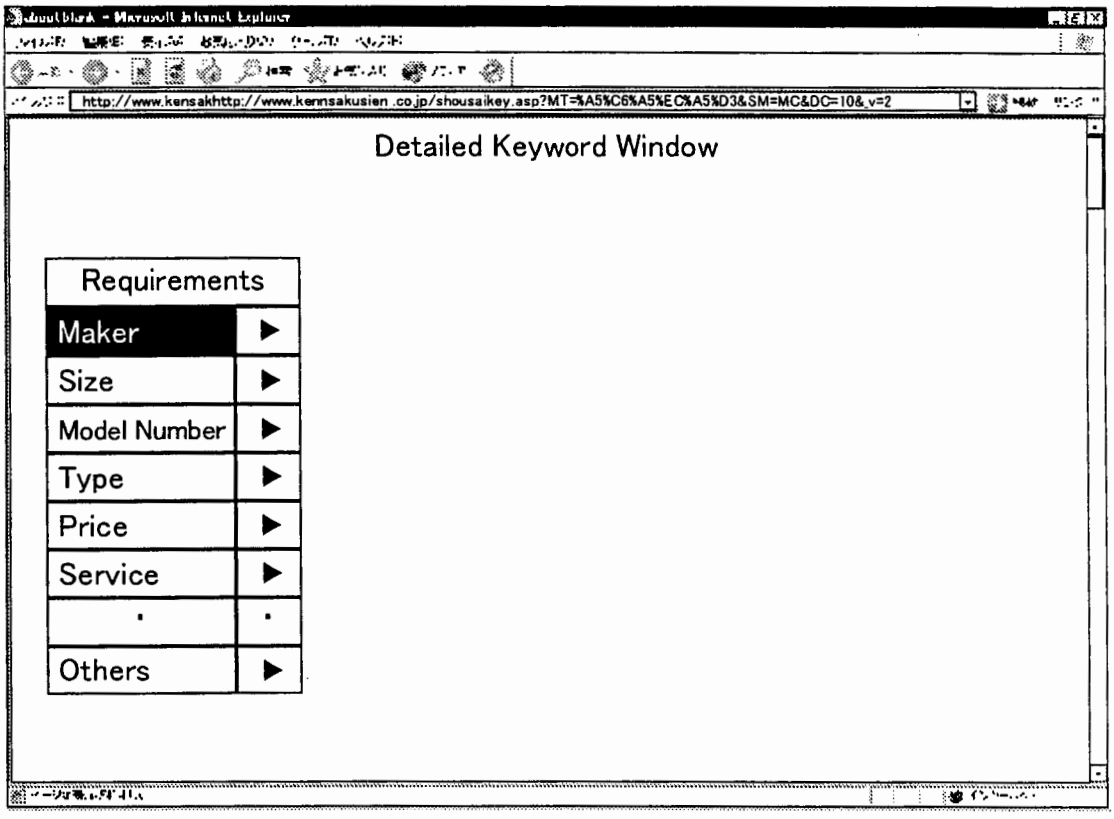

http://www.kensakhttp://www.kennsakusien .co.jp/shousaikey.asp?MT=%A5%C6%A5%EC%A5%D3&SM=MC&DC=10&_v=2
Detailed Keyword Window
Requirements
Maker
Size
Model Number
Type
Price
Service
Others

Fig.17

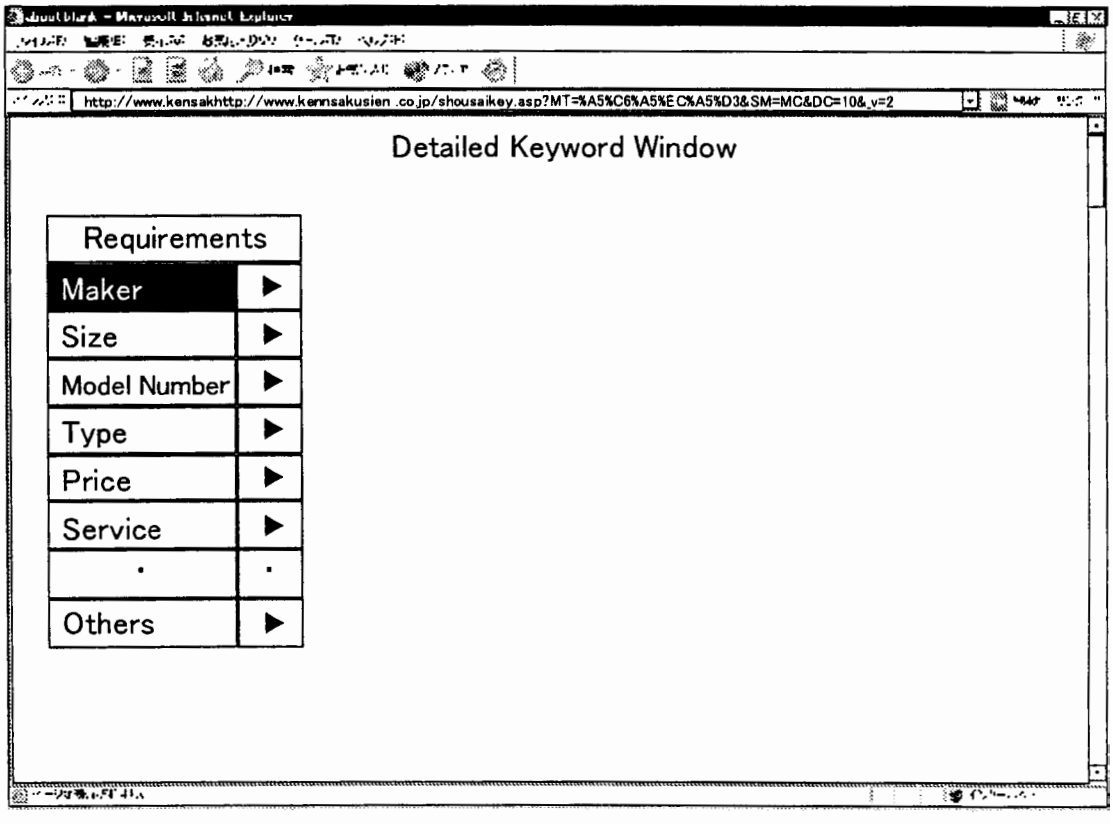

http://www.kensakhttp://www.kennsakusien .co.jp/shousaikey.asp?MT=%A5%C6%A5%EC%A5%D3&SM=MC&DC=10&_v=2
Detailed Keyword Window
Requirements
Maker
Size
Model Number
Type
Price
Service
Others

Fig.18

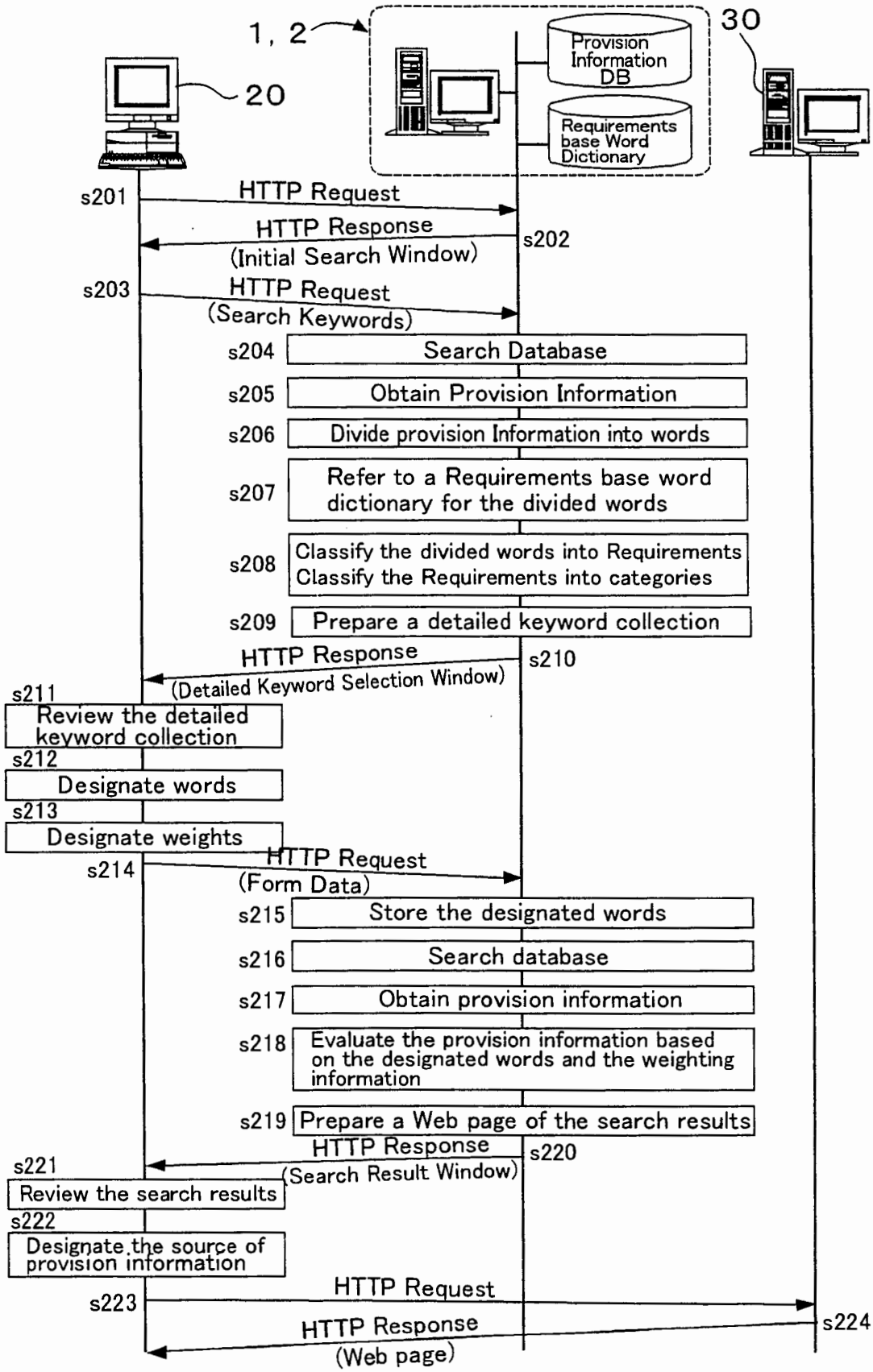

1, 2
Provision Information DB
Requirements base Word Dictionary
30
20
s201
HTTP Request
HTTP Response
(Initial Search Window)
s202
s203
HTTP Request
(Search Keywords)
s204
Search Database
s205
Obtain Provision Information
s206
Divide provision Information into words
s207
Refer to a Requirements base word dictionary for the divided words
s208
Classify the divided words into Requirements
Classify the Requirements into categories
s209
Prepare a detailed keyword collection
HTTP Response
s210
(Detailed Keyword Selection Window)
s211
Review the detailed keyword collection
s212
Designate words
s213
Designate weights
s214
HTTP Request
(Form Data)
s215
Store the designated words
s216
Search database
s217
Obtain provision information
s218
Evaluate the provision information based on the designated words and the weighting information
s219
Prepare a Web page of the search results
HTTP Response
s220
s221
(Search Result Window)
Review the search results
s222
Designate the source of provision information
HTTP Request
s223
HTTP Response
s224
(Web page)

Fig.19

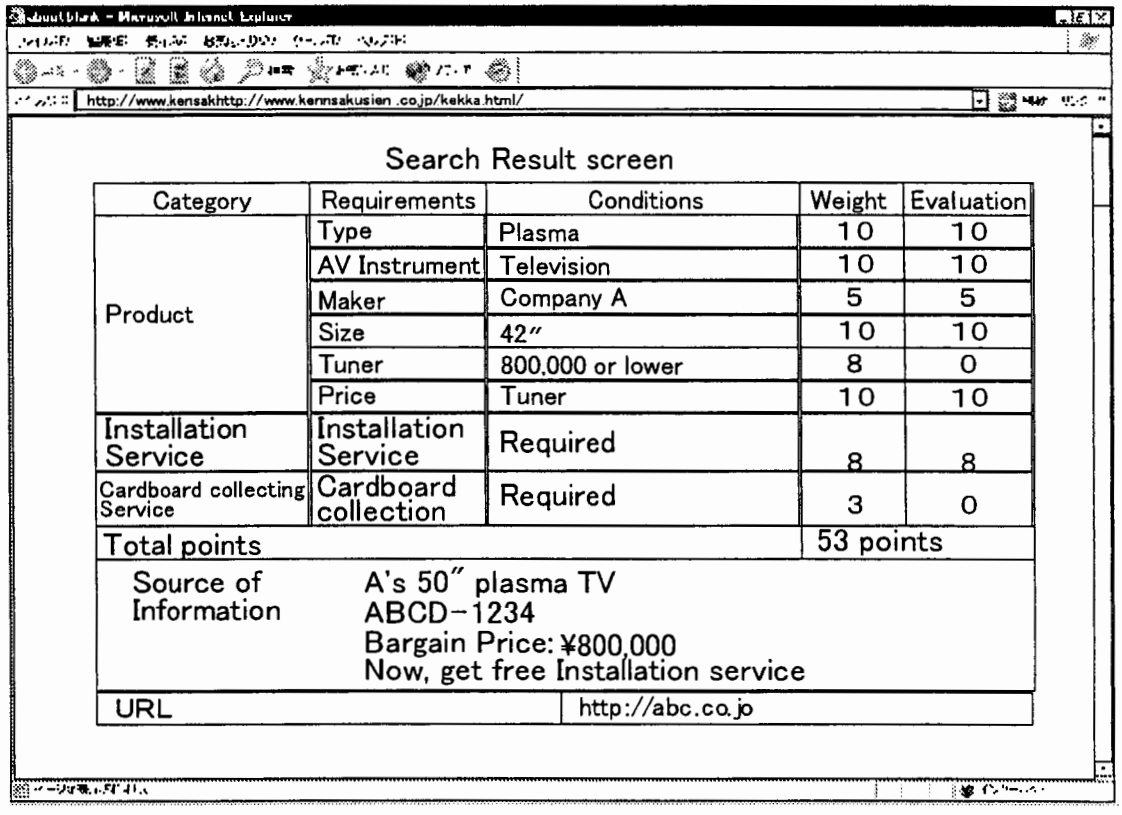

http://www.kensakhttp://www.kennsakusien .co.jp/kekka.html/
Search Result screen
Category
Requirements
Conditions
Weight
Evaluation
Product
Type
Plasma
10
10
AV Instrument
Television
10
10
Maker
Company A
5
5
Size
42″
10
10
Tuner
800,000 or lower
8
0
Price
Tuner
10
10
Installation Service
Installation Service
Required
8
8
Cardboard collecting Service
Cardboard collection
Required
3
0
Total points
53 points
Source of Information
A's 50″ plasma TV
ABCD-1234
Bargain Price: ¥800,000
Now, get free Installation service
URL
http://abc.co.jo

Fig.20