

Fig.1

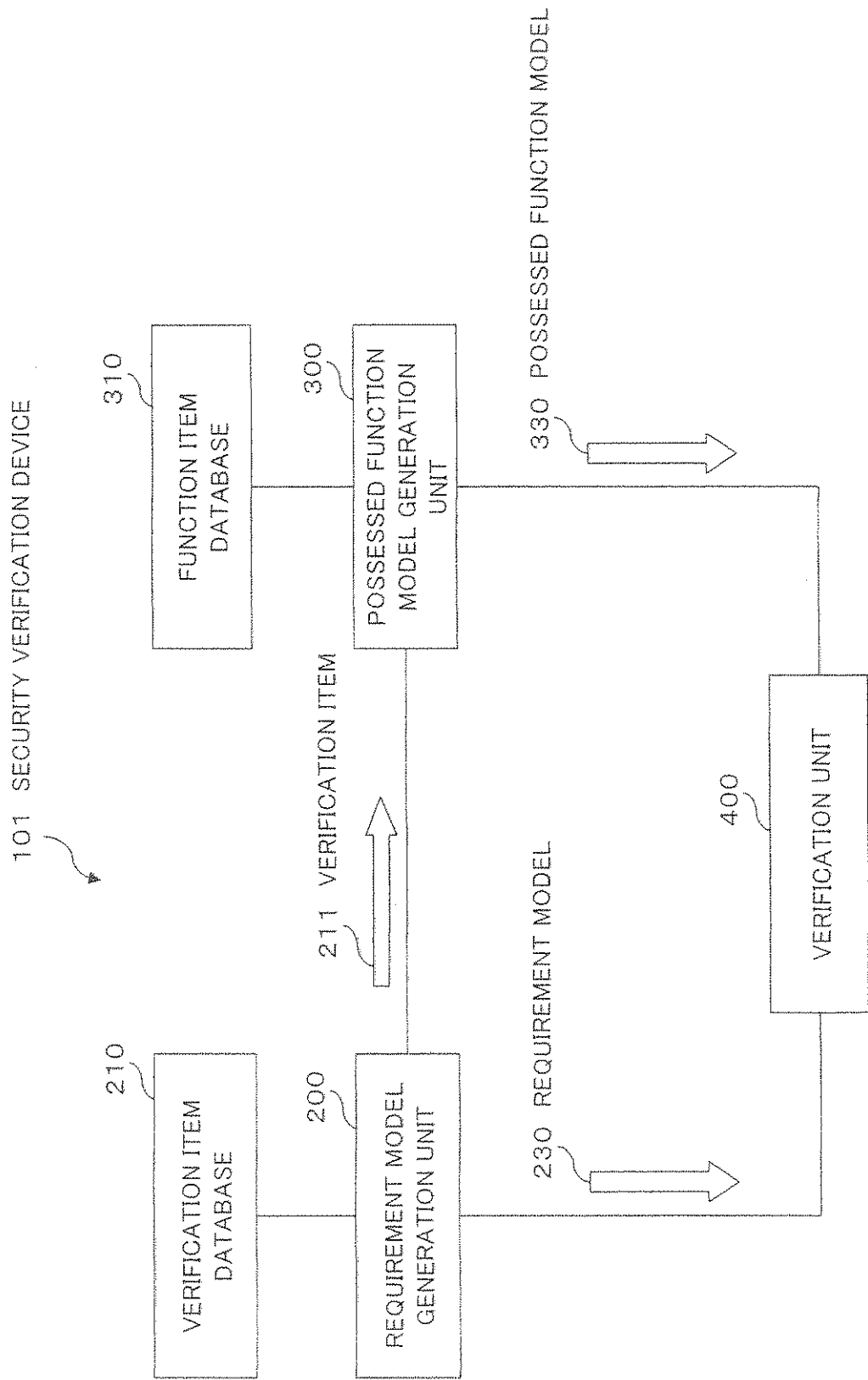


Fig.2

110 SYSTEM REQUIREMENTS

ONLY USER PERMITTED BY "SUBJECT AUTHENTICATION",  
FROM "WEB",  
USING APPLICATION OF "AP",  
ACCESSES PROTECTED ASSET (APPLICATION INFORMATION) OF "DB".

Fig.3

140 SECURITY TARGET MODEL

142 CONNECTION SOURCE

IDENTIFICATION INFORMATION

143 CONNECTION DESTINATION

IDENTIFICATION INFORMATION

|            |                     |
|------------|---------------------|
| INTERNET   | ROUTER              |
| ROUTER     | FIREWALL 1          |
| FIREWALL 1 | EXTERNAL WWW SERVER |
| FIREWALL 1 | FIREWALL 2          |
| FIREWALL 2 | AP SERVER           |
| FIREWALL 2 | DB SERVER           |

Fig.4

## 210 VERIFICATION ITEM DATABASE

| 212 SECURITY FUNCTION NAME               | 213 IMPLEMENTATION METHOD        | 214 PARTS INFORMATION            |
|------------------------------------------|----------------------------------|----------------------------------|
| COMMUNICATION ROUTE SEPARATION           | INFORMATION FLOW CONTROL         | FIREWALL                         |
| SPOOFING PREVENTION                      | SERVER AUTHENTICATION METHOD     | ALL SERVERS                      |
| COUNTER MALWARE MEASURES MANAGEMENT      | MEASURES SOFTWARE INSTALL        | ALL SERVERS                      |
| SUBJECT AUTHENTICATION                   | ID/PASSWORD METHOD               | WWW SERVER, AP SERVER, DB SERVER |
| ADMINISTRATOR AUTHORITY PROTECTION       | ADMINISTRATIVE AUTHORITY CONTROL | ADMINISTRATION SERVER            |
| PRESERVED INFORMATION INTEGRITY SECURING | DIGITAL SIGNATURE                | DB SERVER                        |

Fig.5

211 VERIFICATION ITEM



212 SECURITY FUNCTION NAME      213 IMPLEMENTATION METHOD      214 PARTS INFORMATION

|                        |                    |                                  |
|------------------------|--------------------|----------------------------------|
| SUBJECT AUTHENTICATION | ID/PASSWORD METHOD | WWW SERVER, AP SERVER, DB SERVER |
|------------------------|--------------------|----------------------------------|

Fig.6

|                                      |                            |                           |
|--------------------------------------|----------------------------|---------------------------|
| 230 REQUIREMENT MODEL                |                            |                           |
| 232 PARTS IDENTIFICATION INFORMATION | 233 SECURITY FUNCTION NAME | 234 IMPLEMENTATION METHOD |
| EXTERNAL WWW SERVER                  | SUBJECT AUTHENTICATION     | ID/PASSWORD METHOD        |
| AP SERVER                            | SUBJECT AUTHENTICATION     | ID/PASSWORD METHOD        |
| DB SERVER                            | SUBJECT AUTHENTICATION     | ID/PASSWORD METHOD        |

Fig.7

310 FUNCTION ITEM DATABASE

| 312 PARTS IDENTIFICATION INFORMATION | 313 SECURITY FUNCTION NAME | 314 IMPLEMENTATION MEANS |
|--------------------------------------|----------------------------|--------------------------|
| EXTERNAL WWW SERVER                  | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| EXTERNAL WWW SERVER                  | ENCRYPTION                 | SSL/TLS COMMUNICATION    |
| AP SERVER                            | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| DB SERVER                            | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| AP SERVER                            | IDENTITY AUTHENTICATION    | ACCOUNT LOCK             |
| DB SERVER                            | IDENTITY AUTHENTICATION    | ACCOUNT LOCK             |
| INTERNAL WWW SERVER                  | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |

Fig.8

320 FUNCTION ITEM

| 312 PARTS IDENTIFICATION INFORMATION | 313 SECURITY FUNCTION NAME | 314 IMPLEMENTATION MEANS |
|--------------------------------------|----------------------------|--------------------------|
| EXTERNAL WWW SERVER                  | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| AP SERVER                            | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| DB SERVER                            | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| INTERNAL WWW SERVER                  | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |

Fig.9

330 POSSESSED FUNCTION MODEL

| 332 PARTS IDENTIFICATION INFORMATION | 333 SECURITY FUNCTION NAME | 334 IMPLEMENTATION MEANS |
|--------------------------------------|----------------------------|--------------------------|
| EXTERNAL WWW SERVER                  | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| AP SERVER                            | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |
| DB SERVER                            | IDENTITY AUTHENTICATION    | ID/PASSWORD METHOD       |

Fig.10

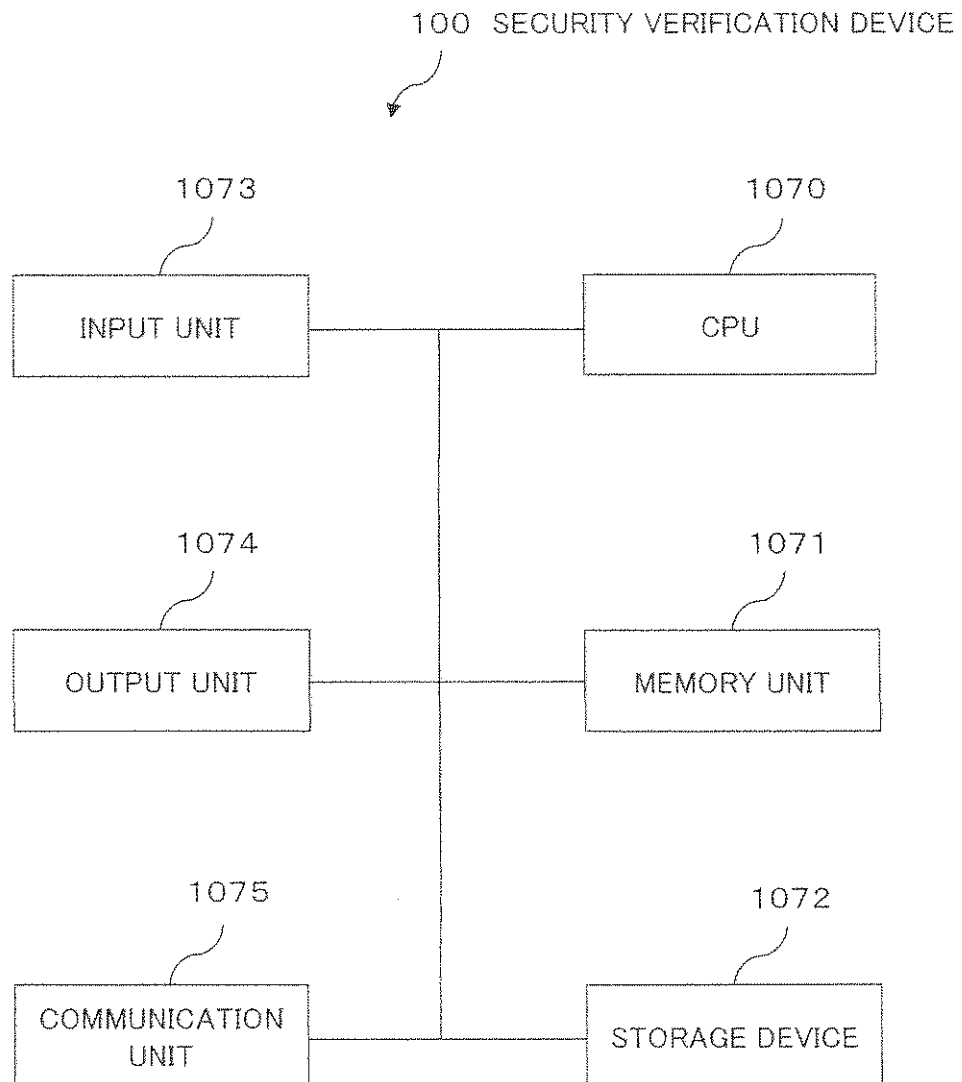


Fig.11

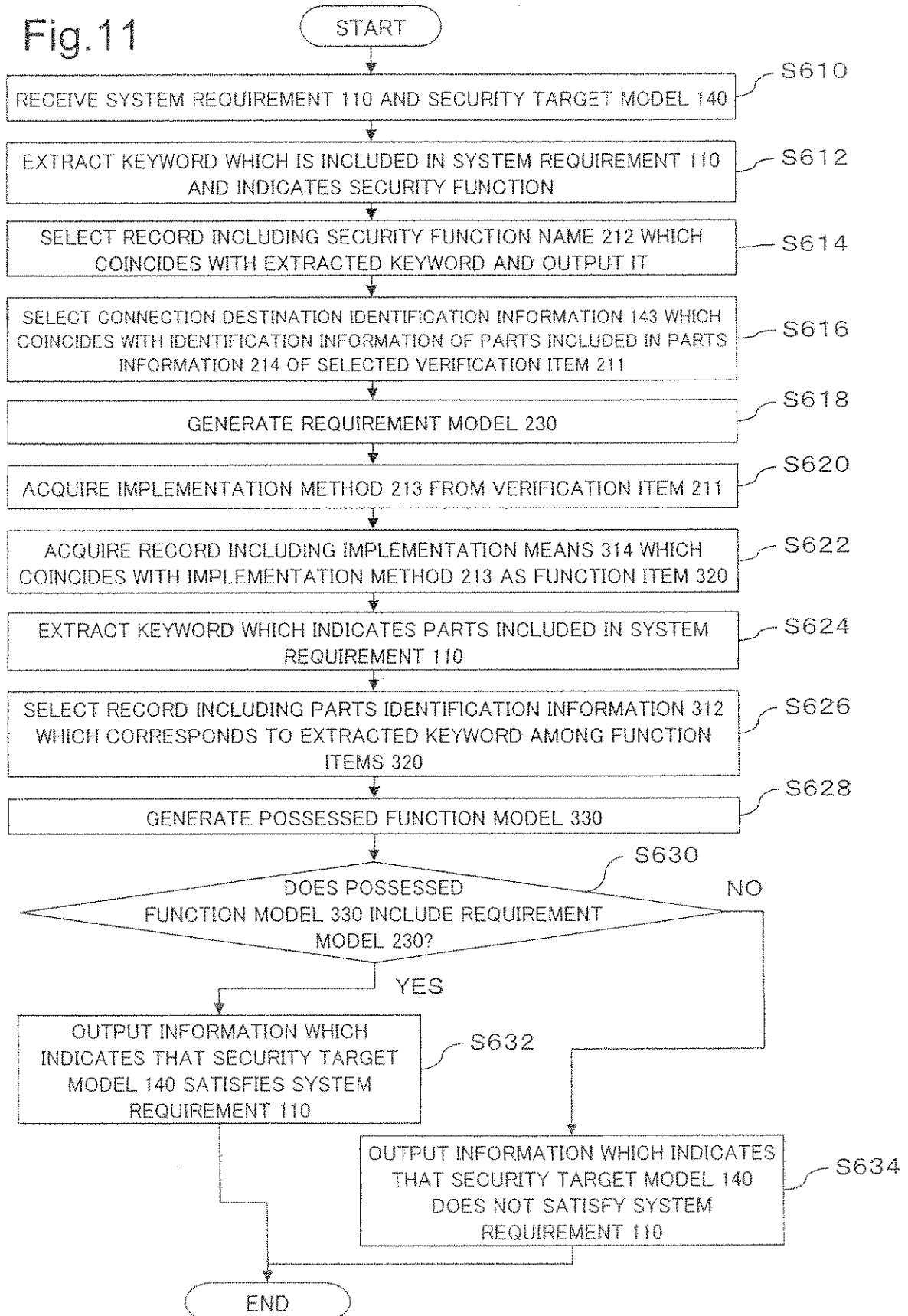
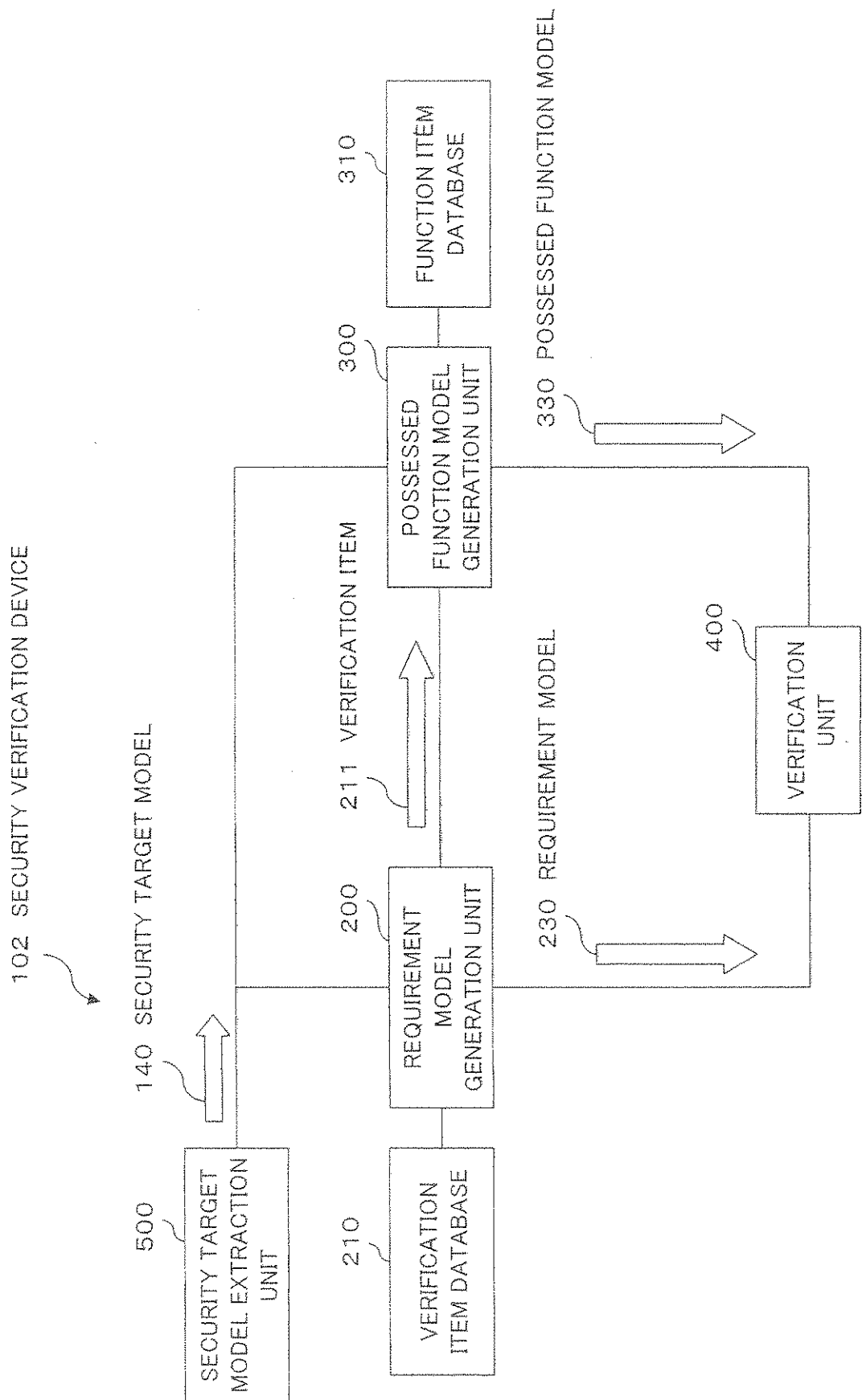


Fig.12



# Fig.13

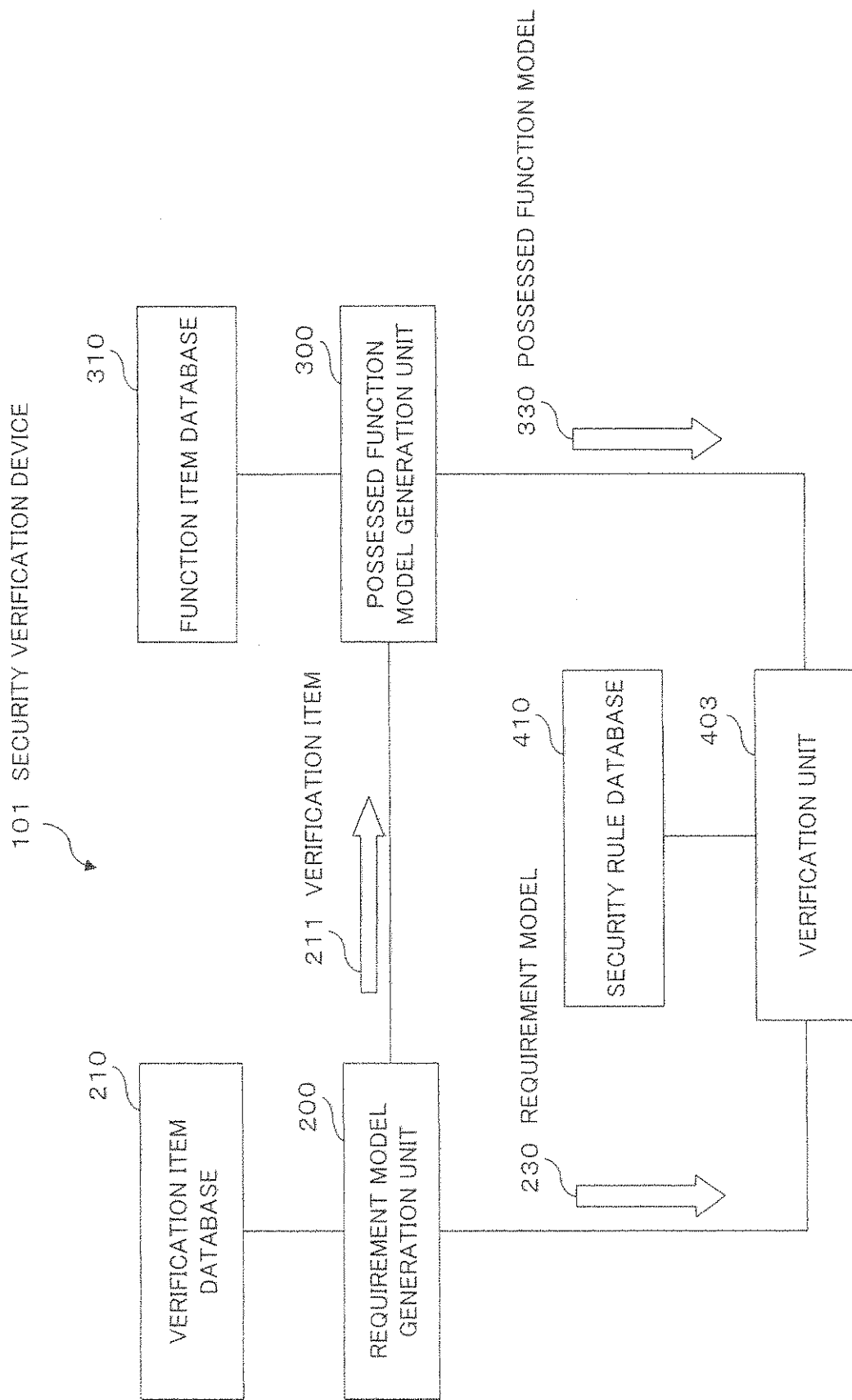
120 SYSTEM MODEL

142 CONNECTION SOURCE IDENTIFICATION INFORMATION

143 CONNECTION DESTINATION IDENTIFICATION INFORMATION

|            |                     |
|------------|---------------------|
| INTERNET   | ROUTER              |
| ROUTER     | FIREWALL 1          |
| FIREWALL 1 | NTP                 |
| FIREWALL 1 | DNS                 |
| FIREWALL 1 | EXTERNAL WWW SERVER |
| FIREWALL 1 | FIREWALL 2          |
| FIREWALL 2 | AP SERVER           |
| FIREWALL 2 | DB SERVER           |
| FIREWALL 2 | INTERNAL WWW SERVER |

Fig.14



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410 SECURITY RULE DATABASE

| 412 SECURITY FUNCTION NAME | 413 RULE IDENTIFICATION INFORMATION |
|----------------------------|-------------------------------------|
|----------------------------|-------------------------------------|

|                                          |                     |
|------------------------------------------|---------------------|
| COMMUNICATION ROUTE SEPARATION           | 2. 3. 4. 1(1)(a)    |
| SPOOFING PREVENTION                      | 2. 3. 3. 2(1)(a)(I) |
| COUNTER MALWARE MEASURES MANAGEMENT      | 2. 2. 2. 2(1)(d)    |
| SUBJECT AUTHENTICATION                   | 2. 2. 1. 1(1)(a)    |
| ADMINISTRATOR AUTHORITY PROTECTION       | 2. 2. 1. 1(1)(I)    |
| PRESERVED INFORMATION INTEGRITY SECURING | 2. 2. 1. 6(1)(d)    |

Fig.16

