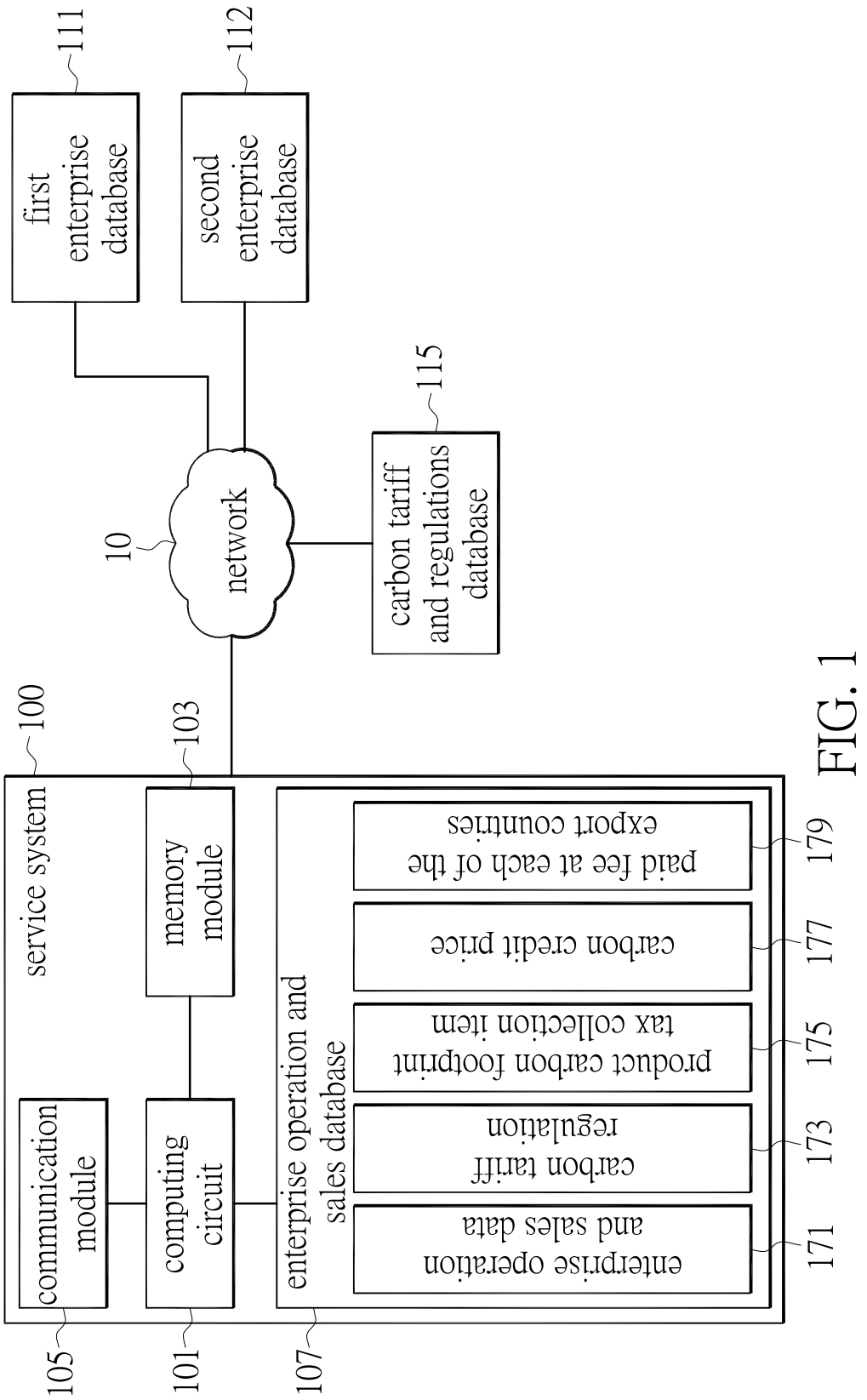

first enterprise database
111
second enterprise database
112
10
network
carbon tariff and regulations database
115
service system
100
memory module
103
communication module
105
computing circuit
101
enterprise operation and sales database
107
enterprise operation and sales data
171
carbon tariff regulation
173
product carbon footprint tax collection item
175
carbon credit price
177
paid fee at each of the export countries
179

FIG. 1

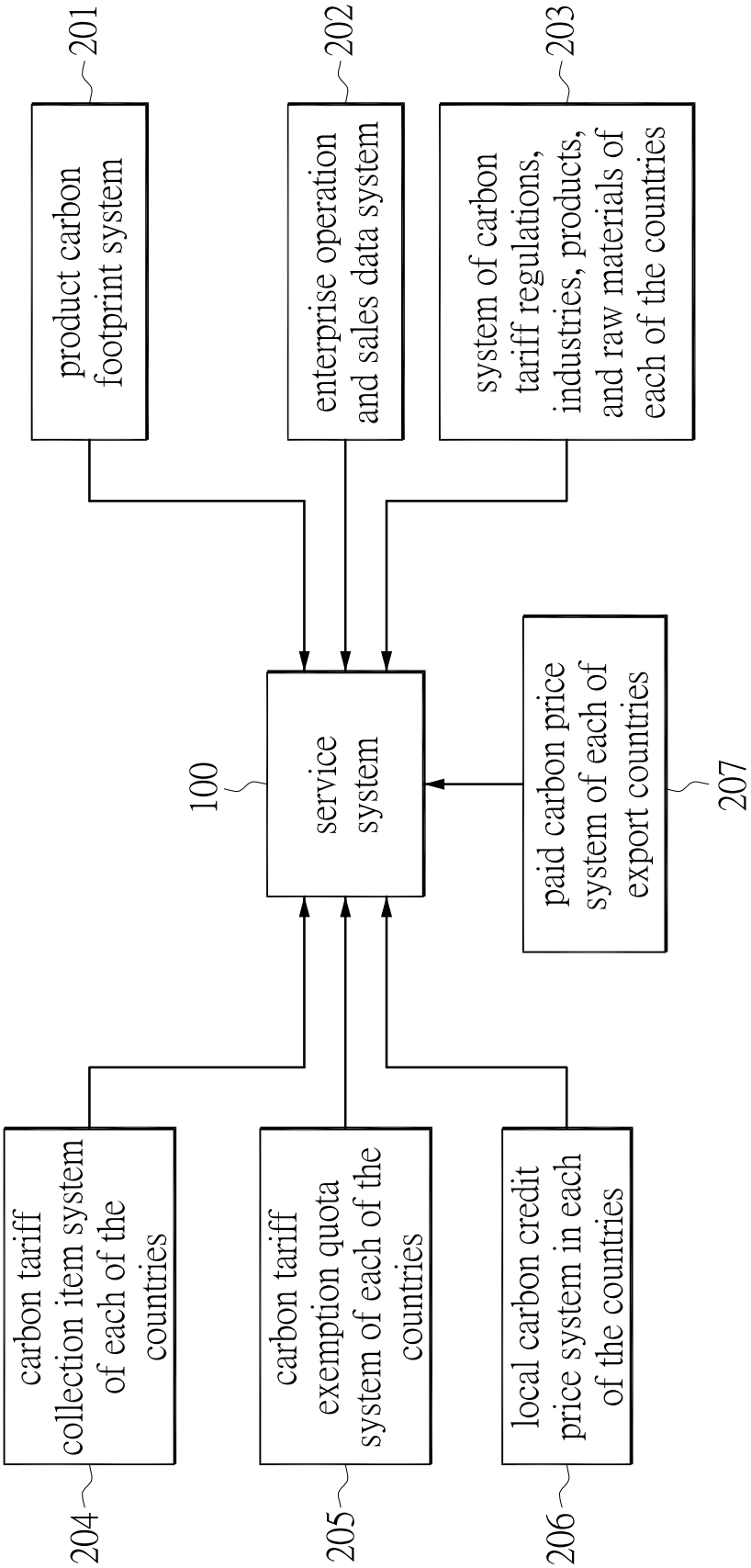

201
product carbon footprint system
202
enterprise operation and sales data system
203
system of carbon tariff regulations, industries, products, and raw materials of each of the countries
100
service system
207
paid carbon price system of each of export countries
204
carbon tariff collection item system of each of the countries
205
carbon tariff exemption quota system of each of the countries
206
local carbon credit price system in each of the countries

FIG. 2

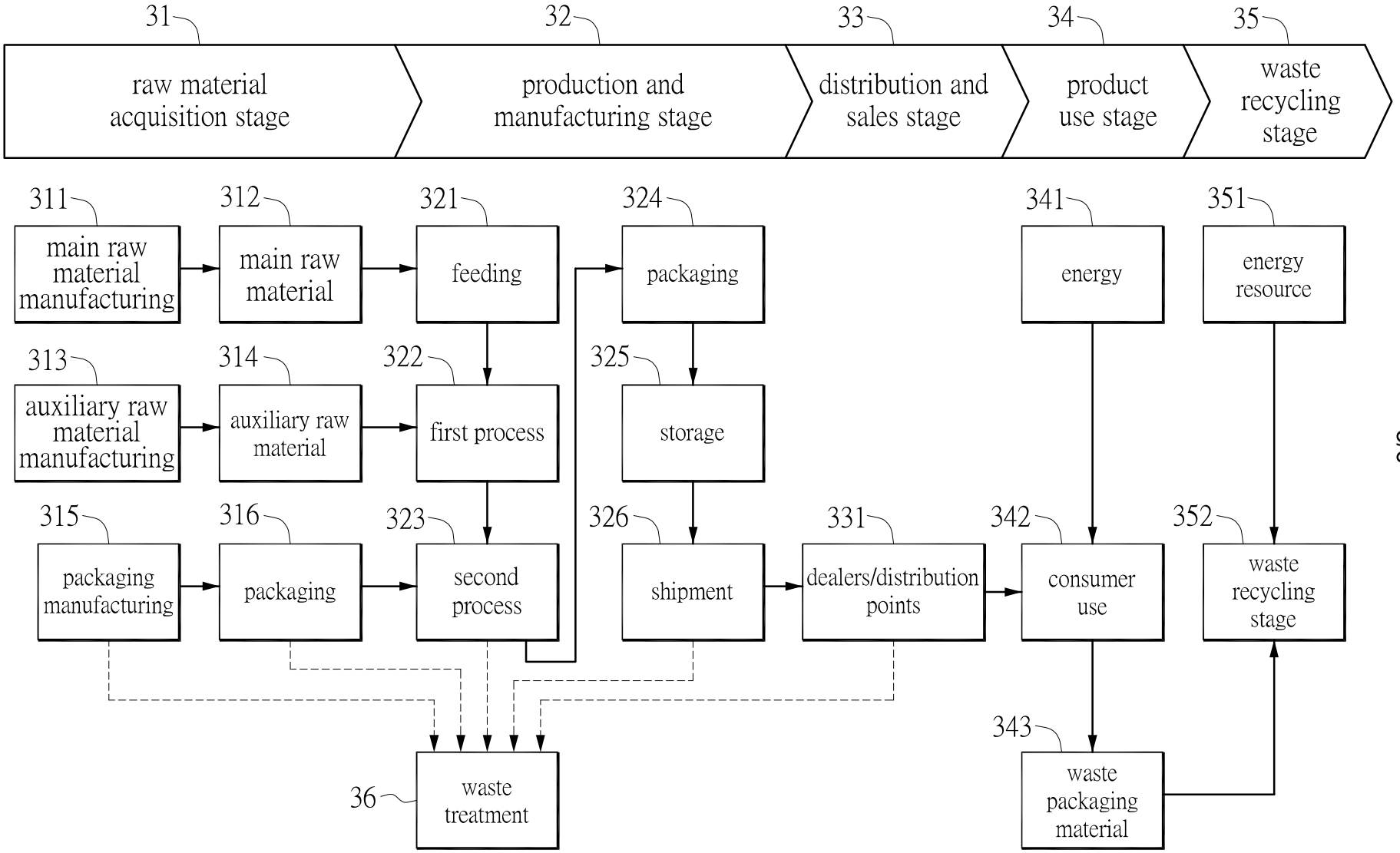

31
raw material acquisition stage
32
production and manufacturing stage
33
distribution and sales stage
34
product use stage
35
waste recycling stage
311
main raw material manufacturing
312
main raw material
321
feeding
324
packaging
341
energy
351
energy resource
313
auxiliary raw material manufacturing
314
auxiliary raw material
322
first process
325
storage
315
packaging manufacturing
316
packaging
323
second process
326
shipment
331
dealers/distribution points
342
consumer use
352
waste recycling stage
343
waste packaging material
36
waste treatment

FIG. 3

Scopes	Organizational greenhouse gas inventory	Product carbon footprint
Scope 1: direct GHG emissions	Category 1.1 Direct emissions from stationary combustion	Y
	Category 1.2 Direct emissions from mobile combustion	Y
	Category 1.3 Direct process emissions and removals from industrial processes	Y
	Category 1.4 Direct fugitive emissions from the release of GHGs in anthropogenic systems	Y
	Category 1.5 Direct emissions and removals from land use, land use change and forestry (LULUCF)	Y
Scope 2: energy indirect GHG emissions	Category 2.1 Indirect emissions from imported electricity	Y
	Category 2.2 Indirect emissions from imported energy	Y
Scope 3: other indirect GHG emissions	Category 3.1 Emissions from upstream transport and distribution for goods (Scope 3-4) Category 3.2 Emissions from downstream transport and distribution for goods (Scope 3-9) Category 3.3 Emissions from employee commuting (Scope 3-7) Category 3.4 Emissions from client and visitor transport Category 3.5 Emissions from business travel (Scope 3-6)	
	4.1a Emissions from purchased goods (Scope 3-1) 4.1b Upstream emissions associated with purchased energy (Scope 3-3)	Y
	4.2 Emissions from capital goods (Scope 3-2) 4.3 Emissions from disposal of solid and liquid wastes (Scope 3-5)	Y
	4.4 Emissions from asset use (Scope 3-8) 4.5 Emissions from the use of services (Scope 3-1)	Y
	Category 5.1 Emissions or removals from the use stage (Scope 3-11) Category 5.2 Emissions from downstream leased assets (Scope 3-13) Category 5.3 Emissions from end of life stage of the product (Scope 3-12) Category 5.4 Emissions from investments Scope 3-10: Processing of sold products (Scope 3-15) Scope 3-14: Franchises	
	6.1 Indirect GHG emissions from other sources	

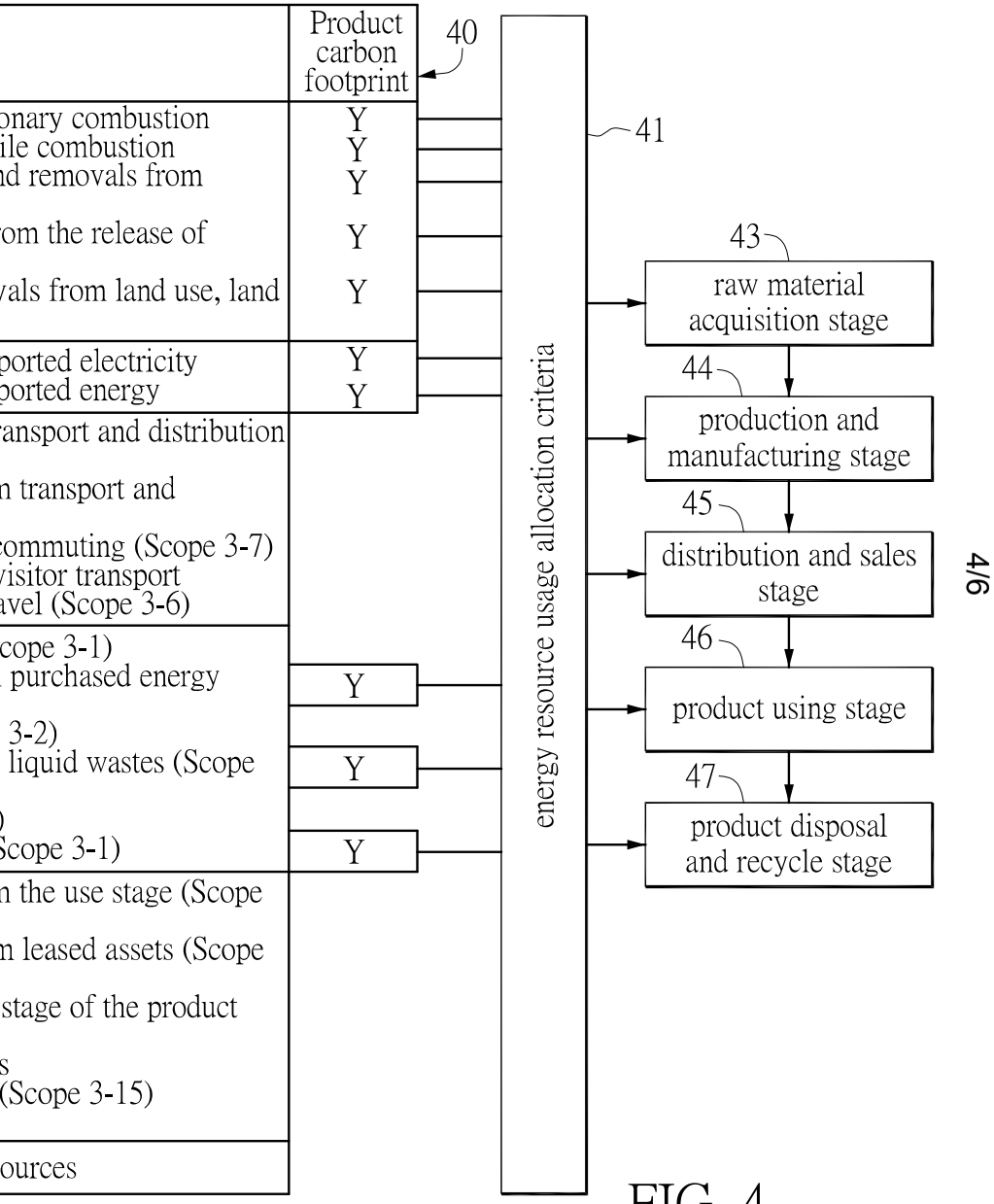


FIG. 4

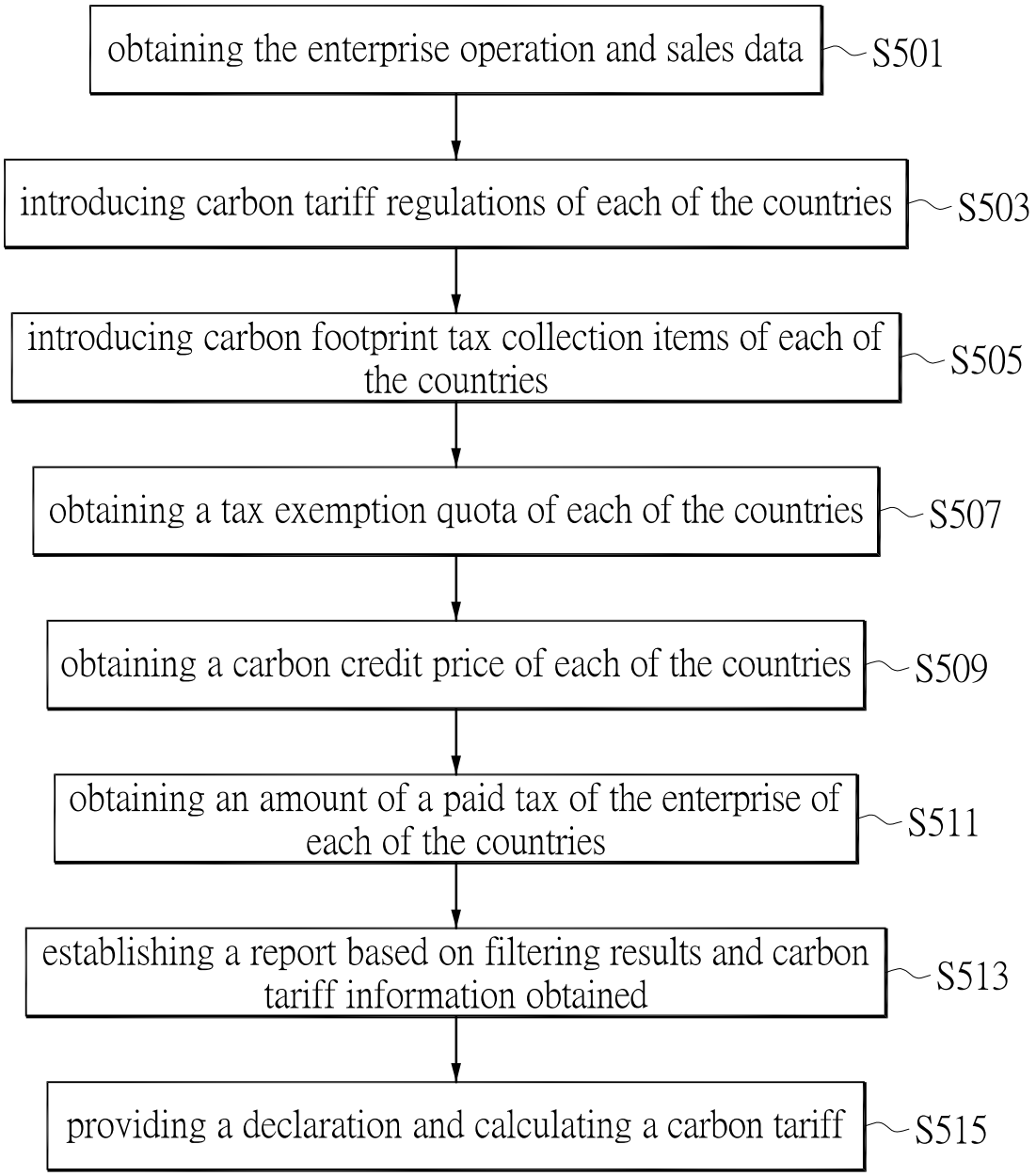

obtaining the enterprise operation and sales data
S501
introducing carbon tariff regulations of each of the countries
S503
introducing carbon footprint tax collection items of each of the countries
S505
obtaining a tax exemption quota of each of the countries
S507
obtaining a carbon credit price of each of the countries
S509
obtaining an amount of a paid tax of the enterprise of each of the countries
S511
establishing a report based on filtering results and carbon tariff information obtained
S513
providing a declaration and calculating a carbon tariff
S515

FIG. 5

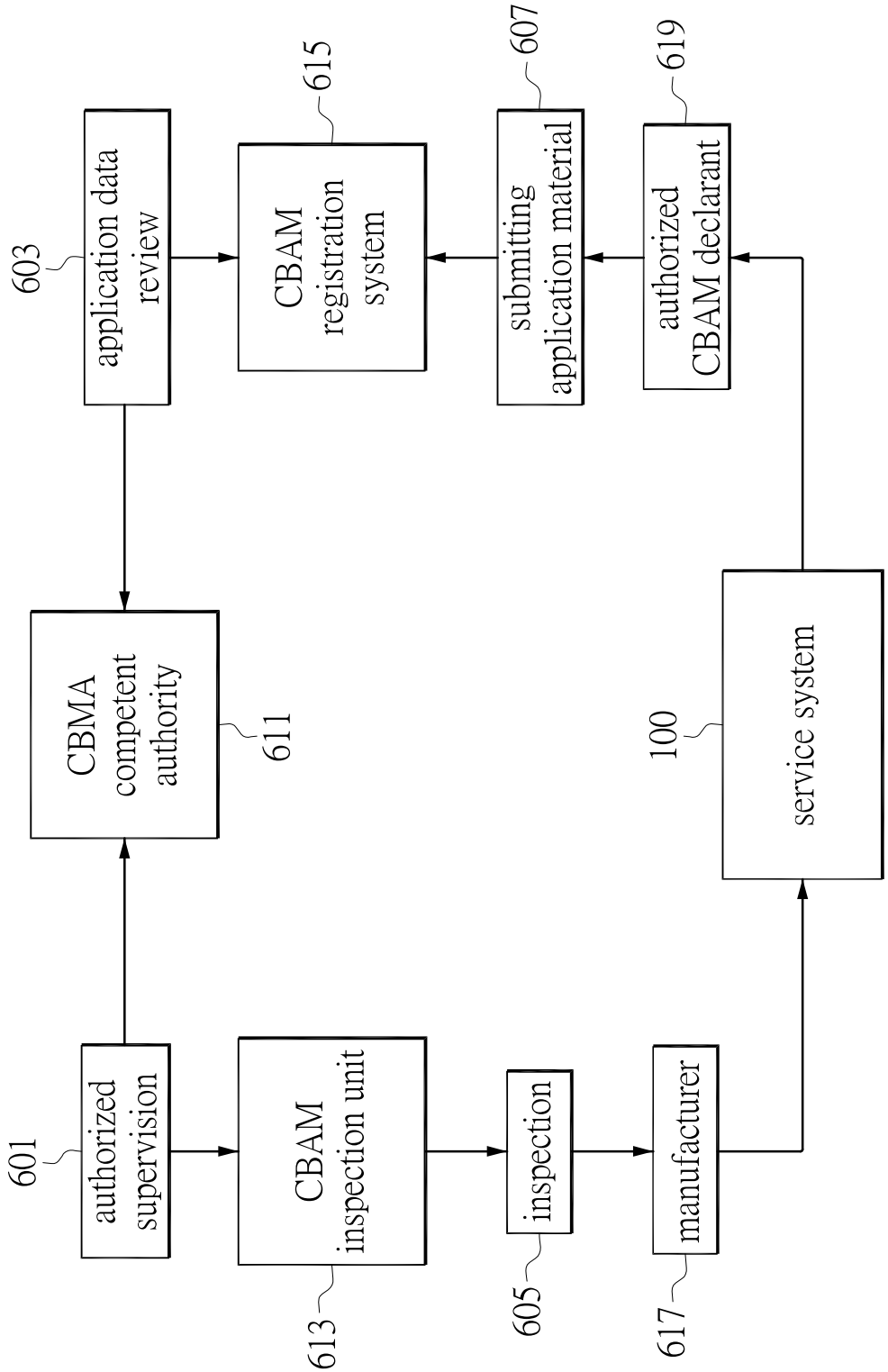

601
authorized supervision
613
CBAM inspection unit
605
inspection
617
manufacturer
100
service system
CBMA competent authority
611
603
application data review
615
CBAM registration system
607
submitting application material
619
authorized CBAM declarant

FIG. 6