

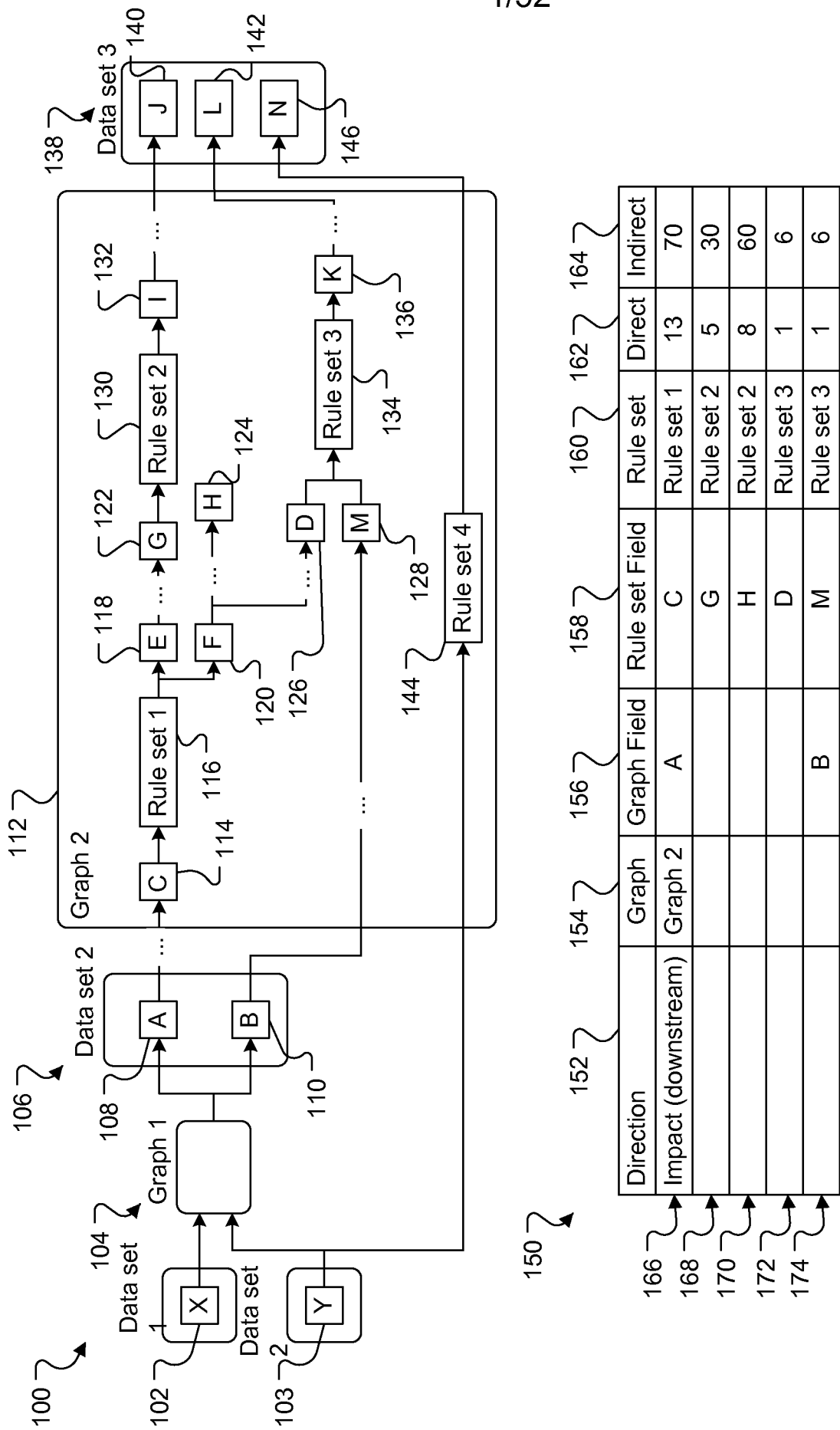


FIG. 1

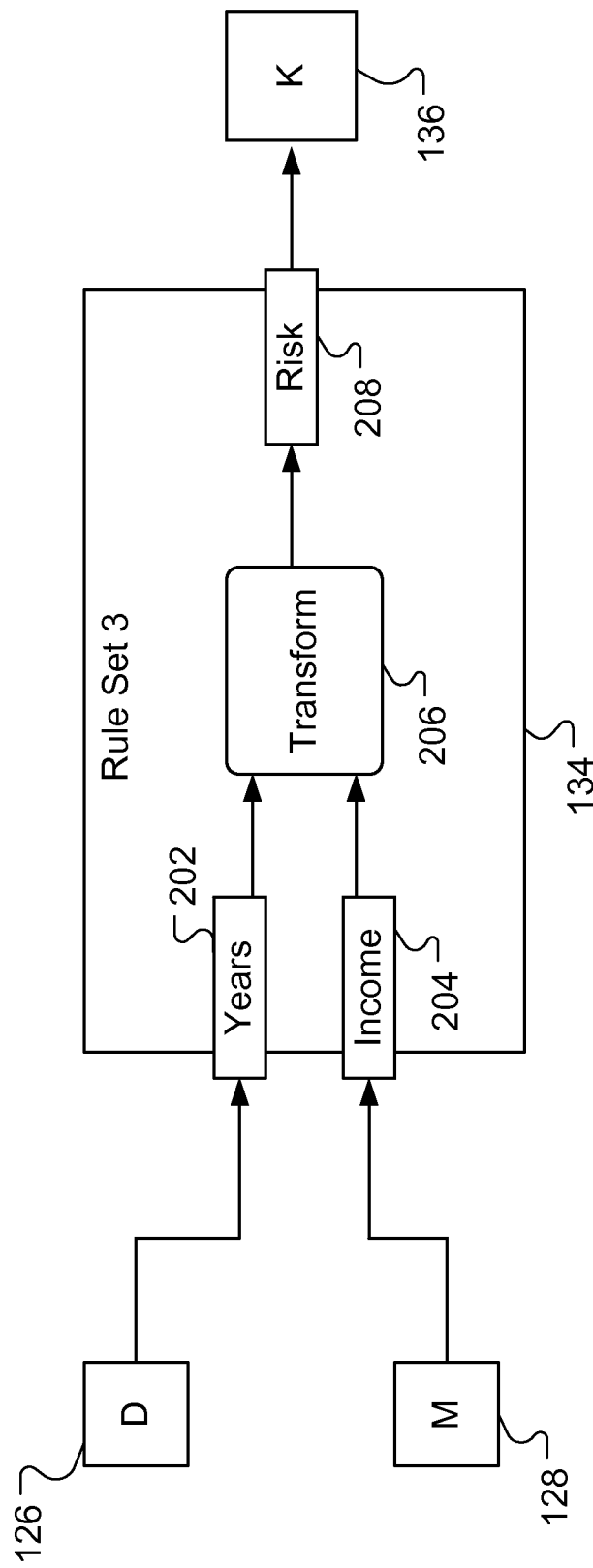


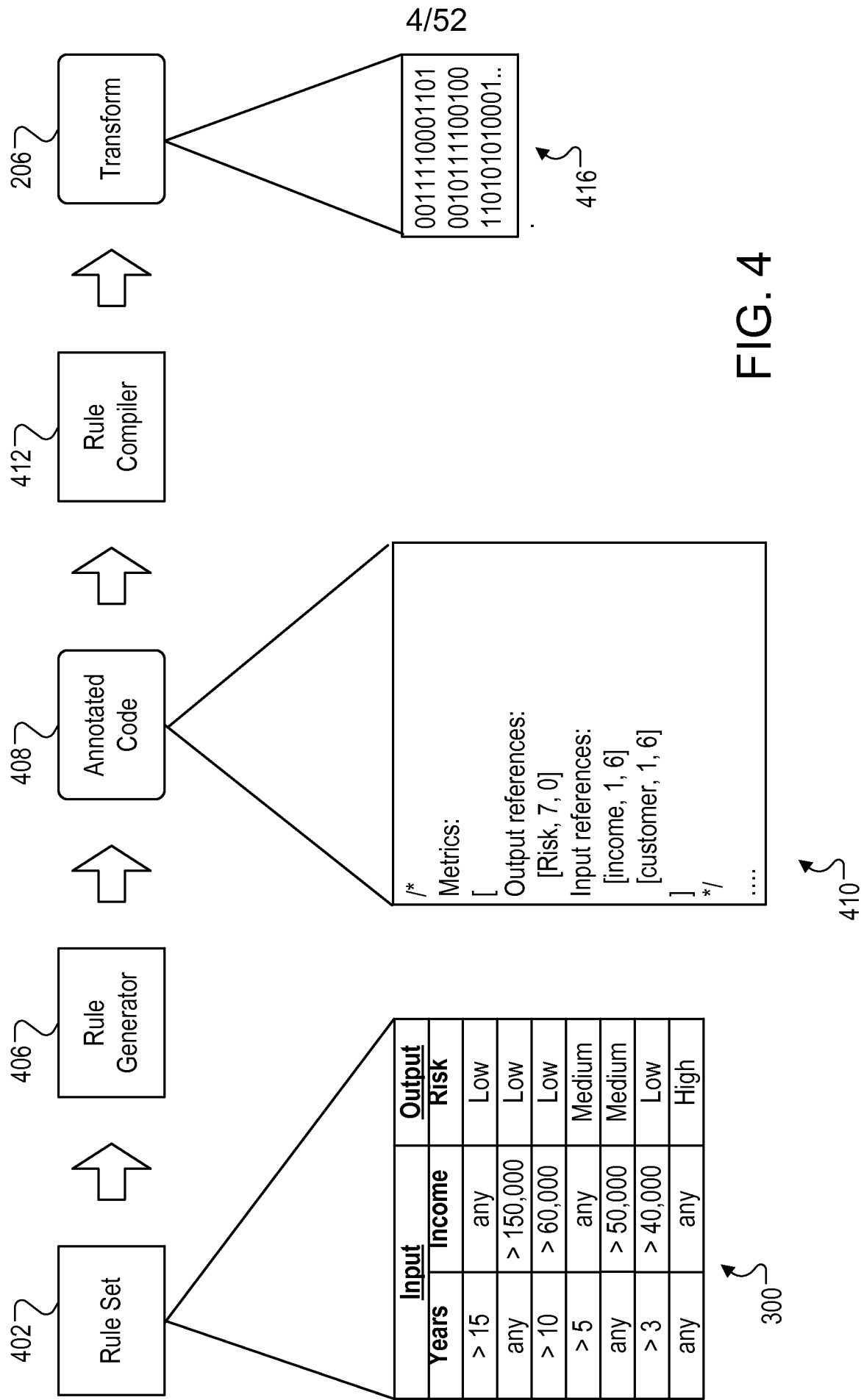
FIG. 2

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300 ↘

<u>302</u> <u>Input</u>		<u>304</u> <u>Output</u>
<u>306</u> Years	<u>308</u> Income	<u>310</u> Risk
312 ↘ >15	any	Low
314 ↘ any	>150,000	Low
316 ↘ >10	>60,000	Low
318 ↘ >5	any	Medium
320 ↘ any	>50,000	Medium
322 ↘ >3	>40,000	Low
324 ↘ any	any	High

FIG. 3



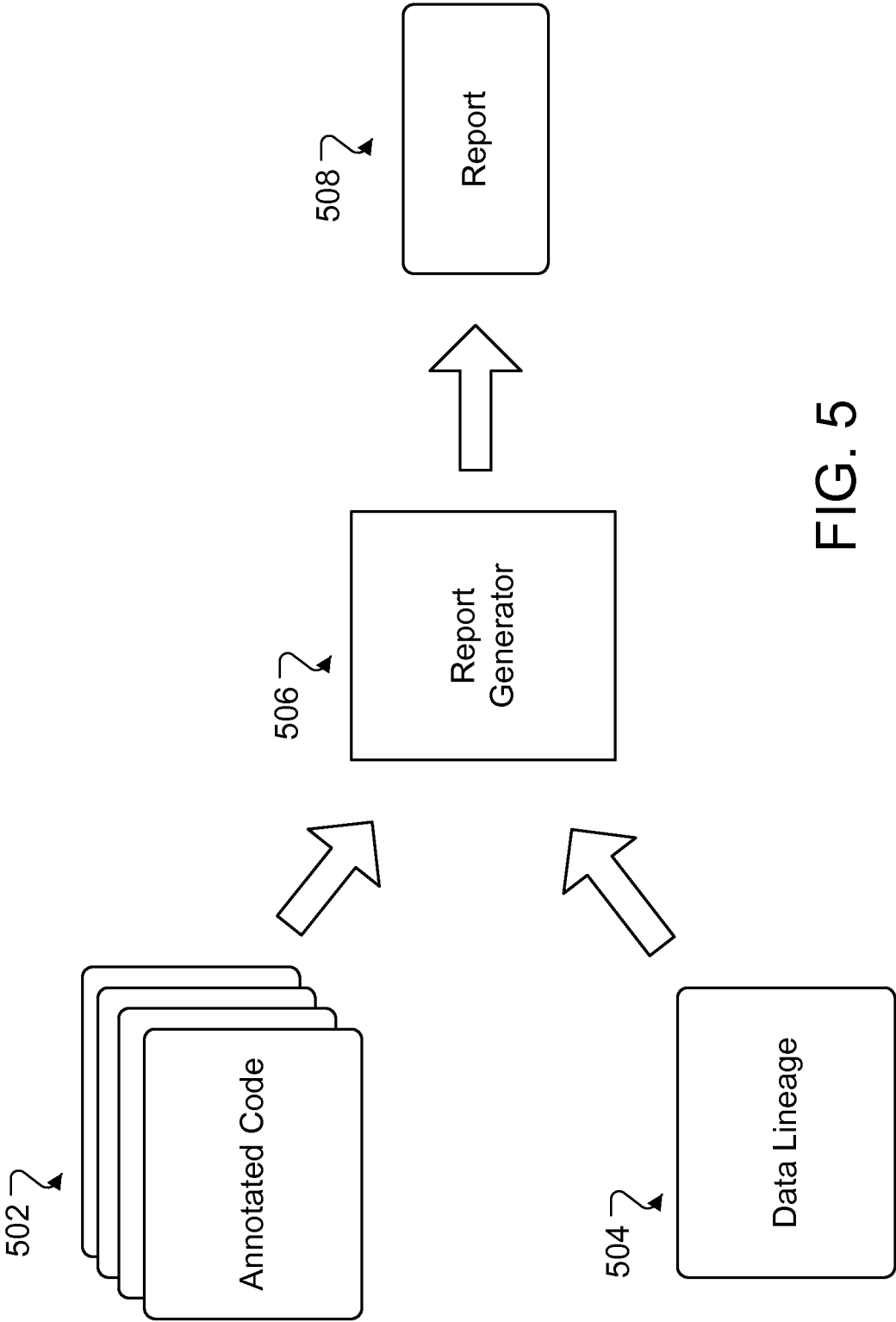


FIG. 5

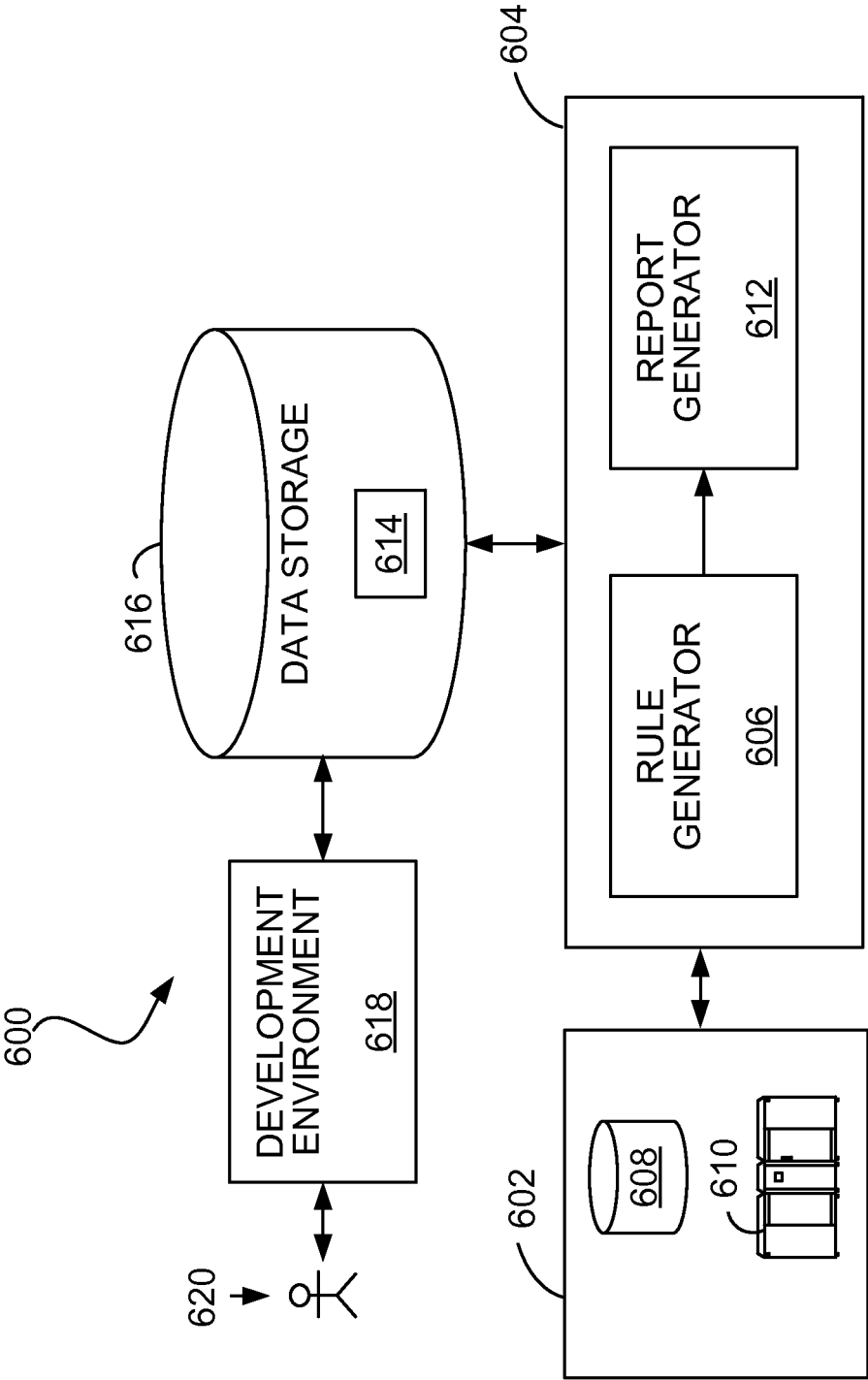


FIG. 6

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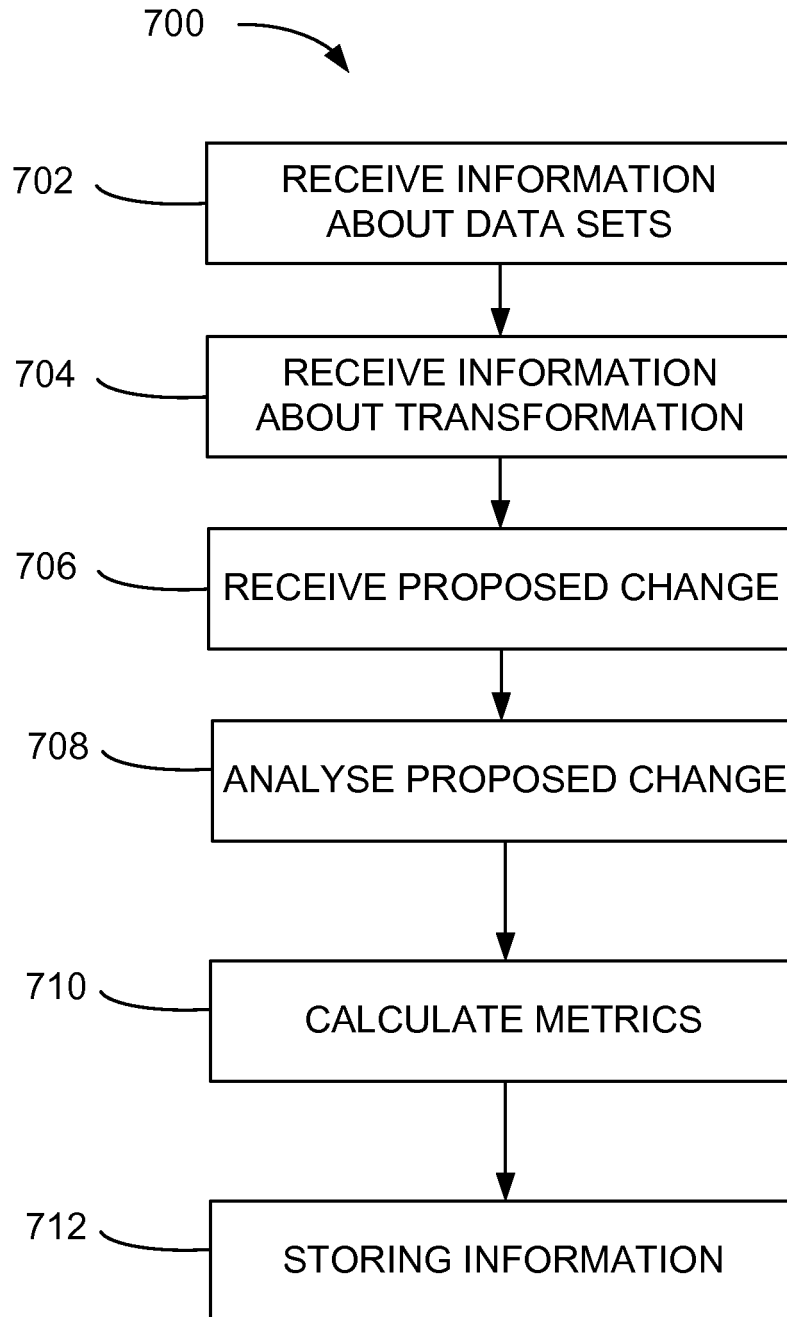


FIG. 7

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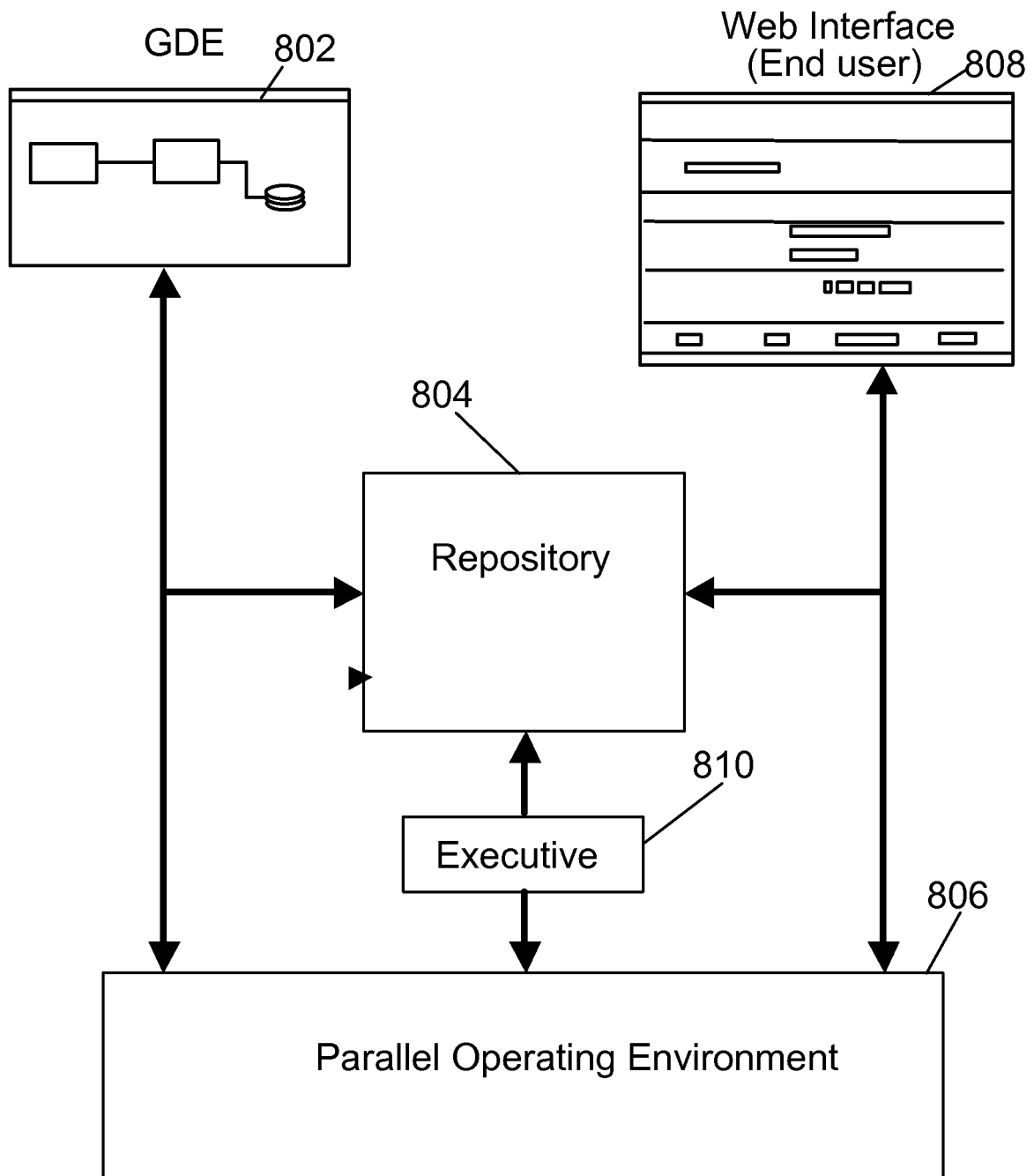


FIG. 8A

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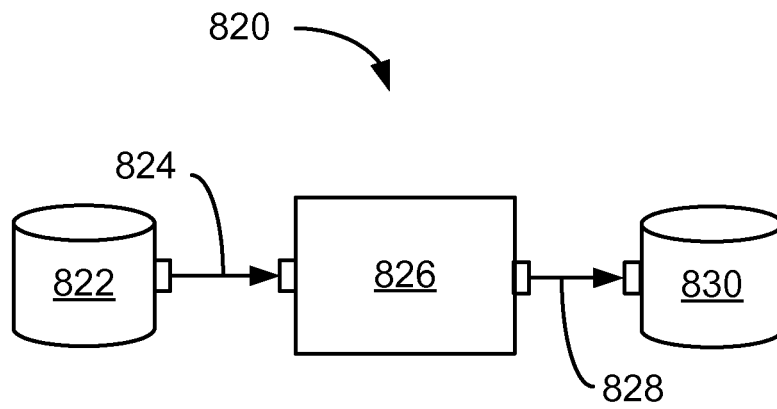


FIG. 8B

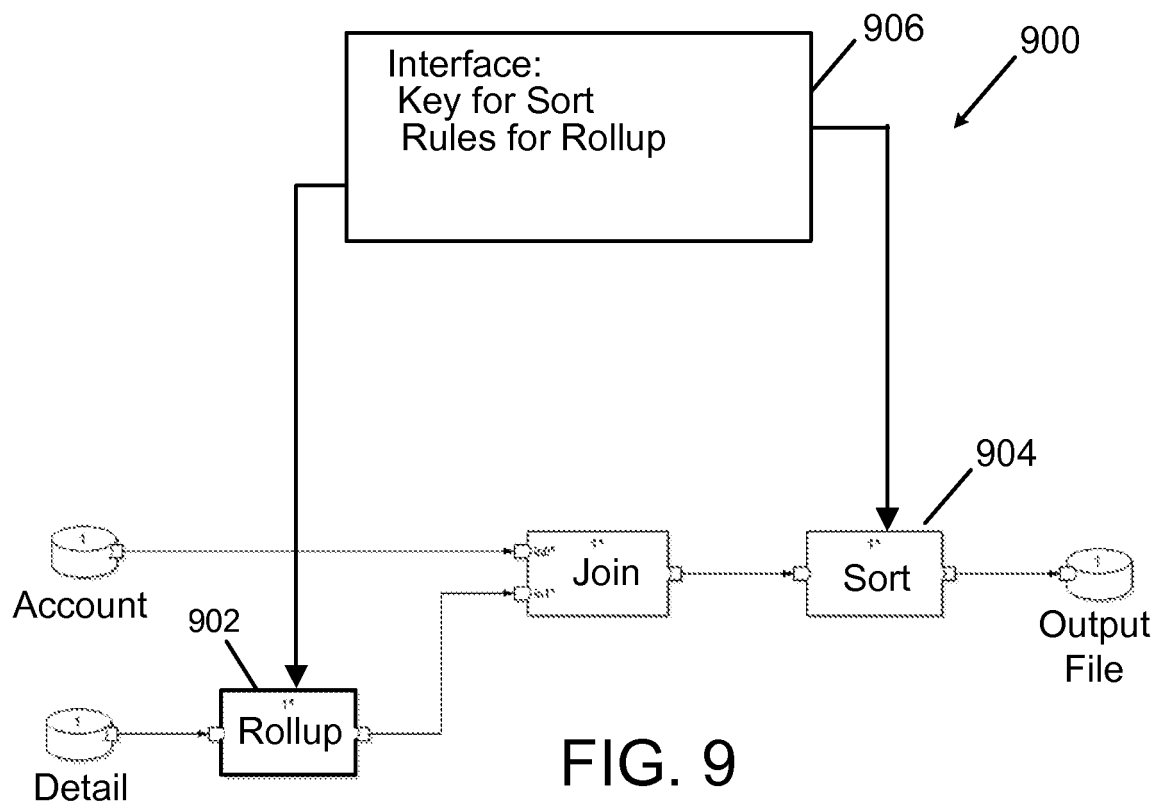


FIG. 9

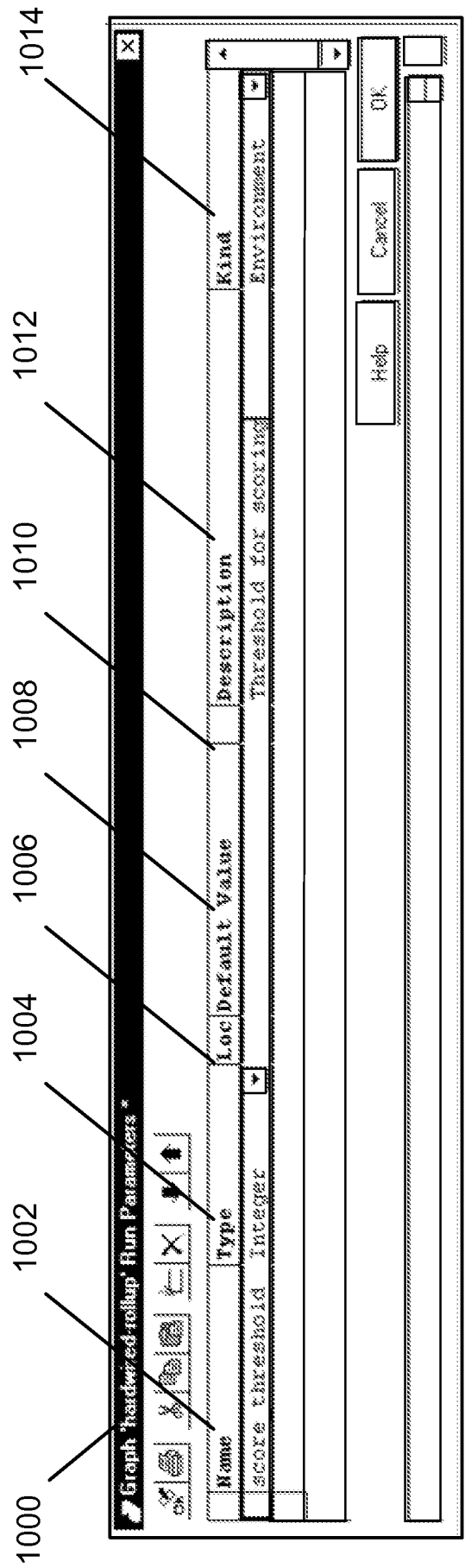


FIG. 10

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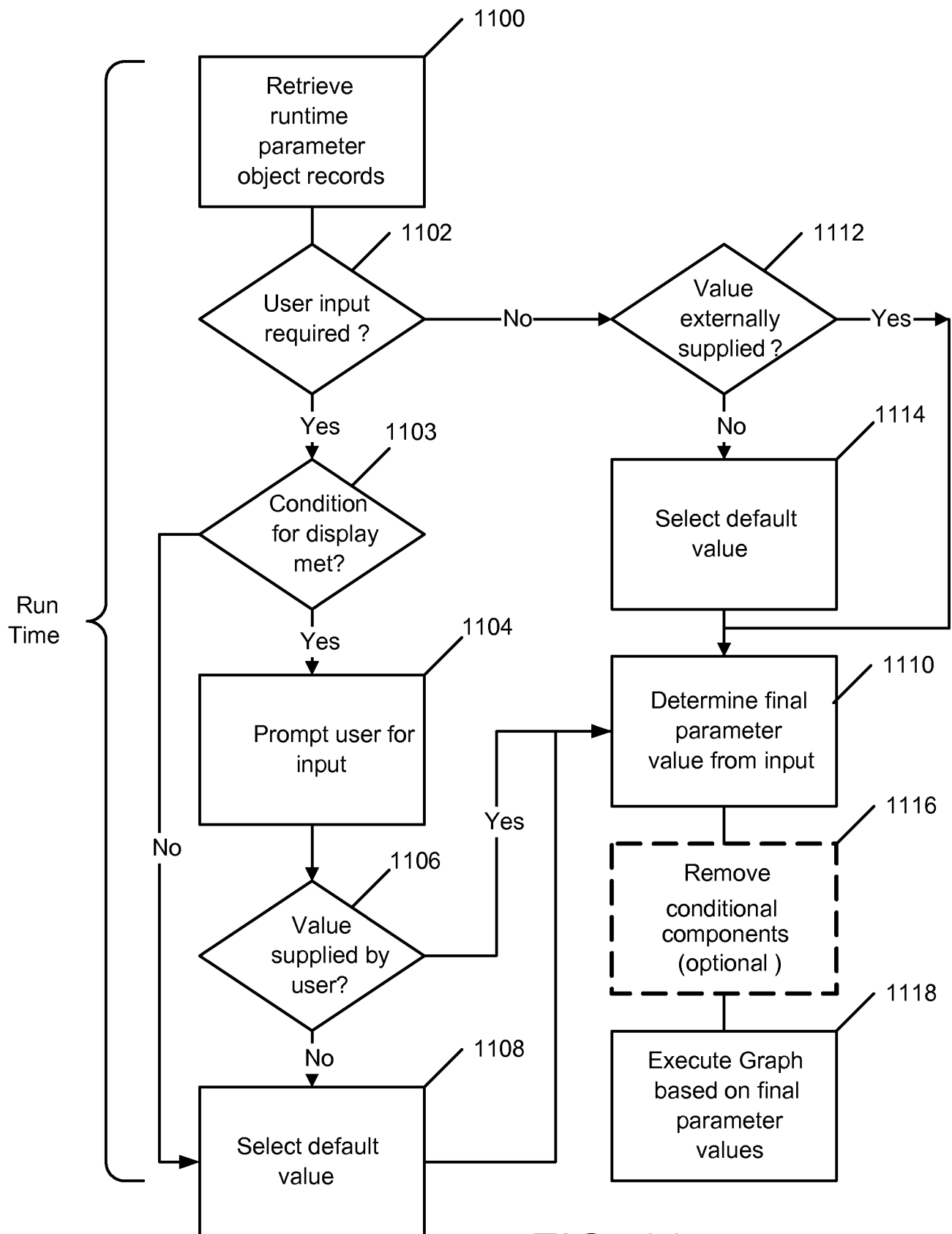


FIG. 11

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1202

last_name ▼ ☒ descending

first_name ▼ ☒ descending

▼ ☐ descending

1204

1200

FIG. 12

1302

cust_id == ▼

AND ▼ last_name == ▼

AND ▼ first_name == ▼

AND ▼ street_addr == ▼

AND ▼ state == ▼

AND ▼ zip == ▼

AND ▼ gender == ▼

AND ▼ income == ▼

AND ▼ newline == ▼

AND ▼

1306

1300

1304

FIG. 13

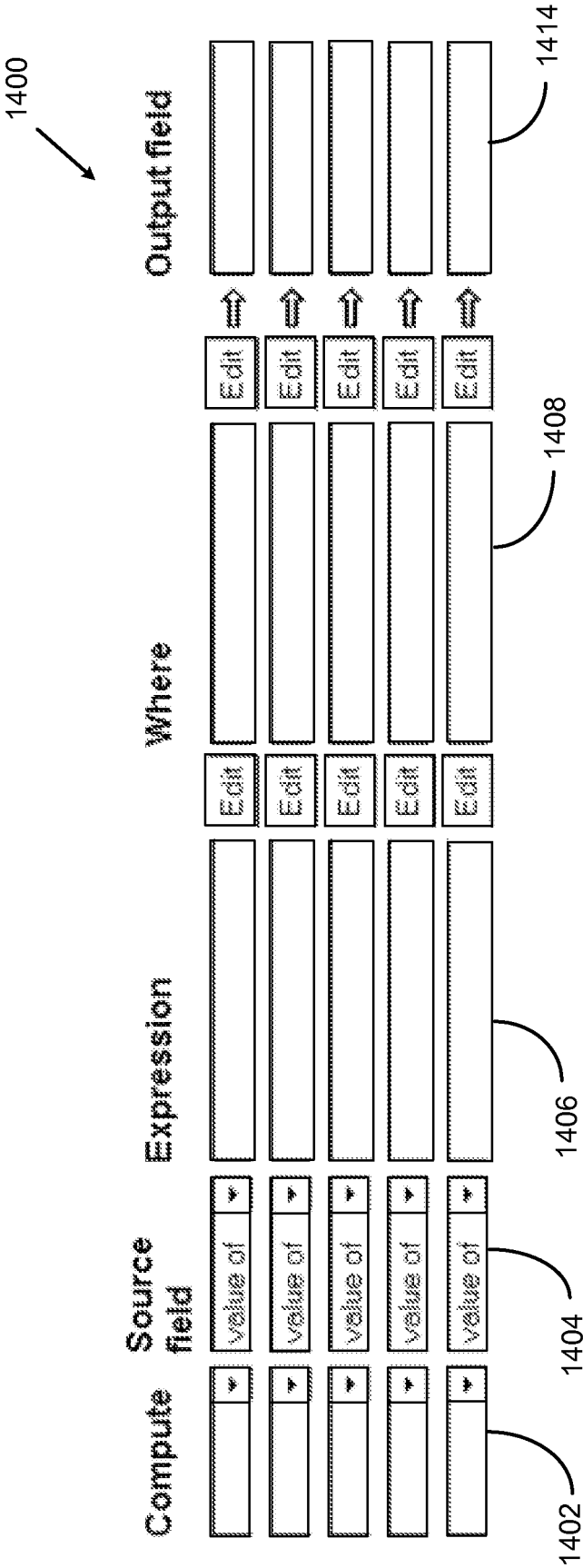


FIG. 14

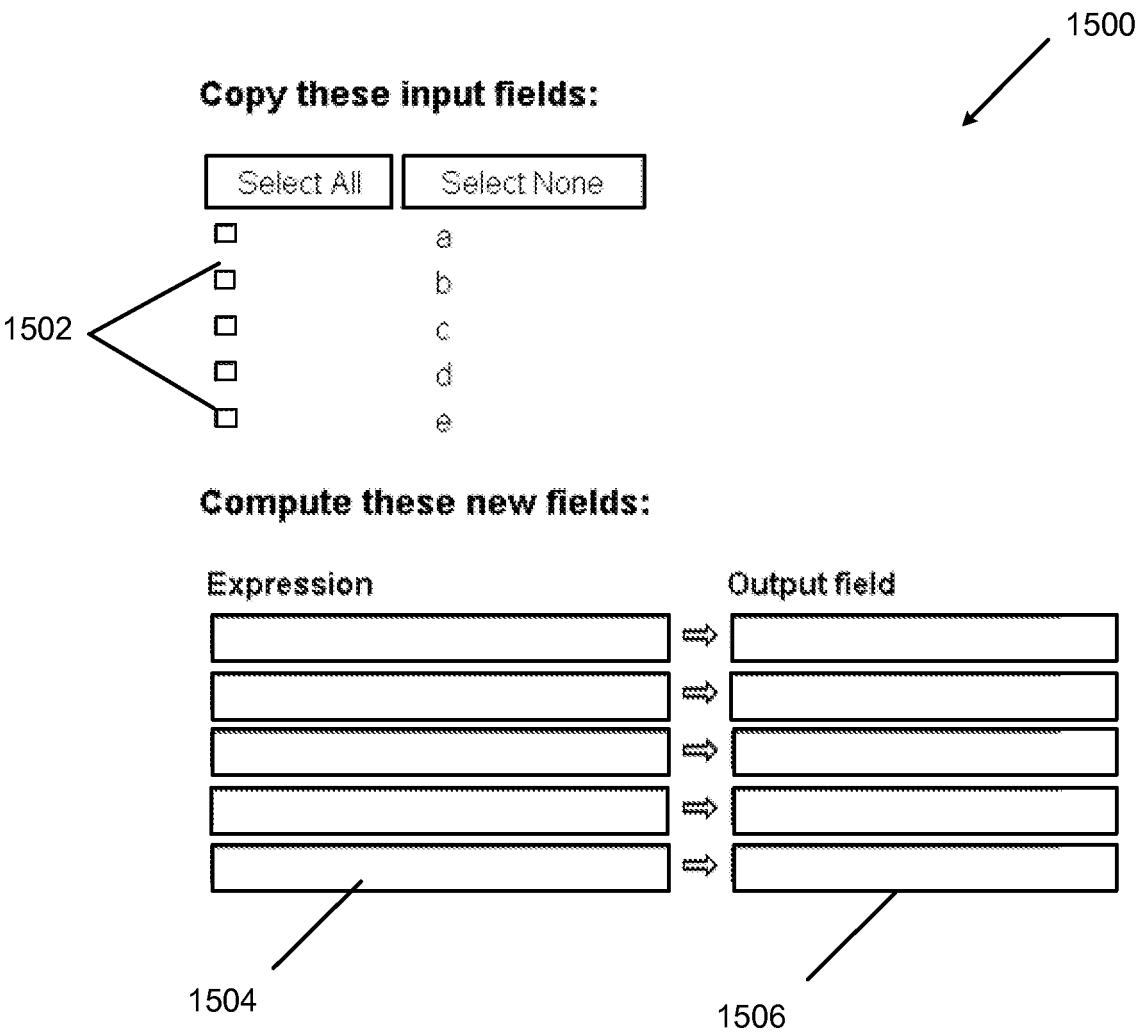


FIG. 15

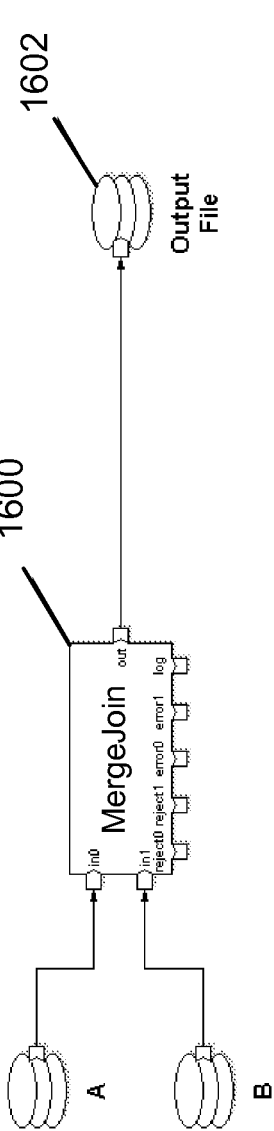


FIG. 16A

Join A and B

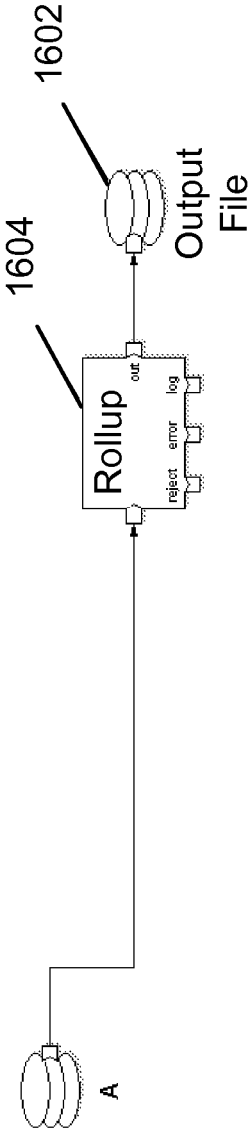


FIG. 16B

Aggregate A

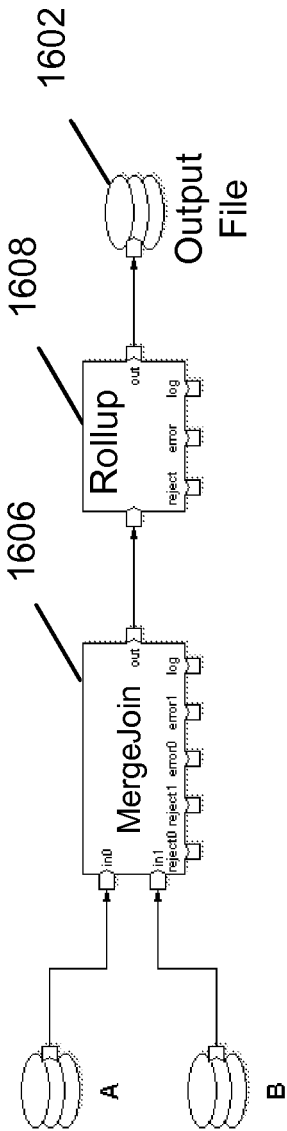


FIG. 16C

Join A & B, then aggregate

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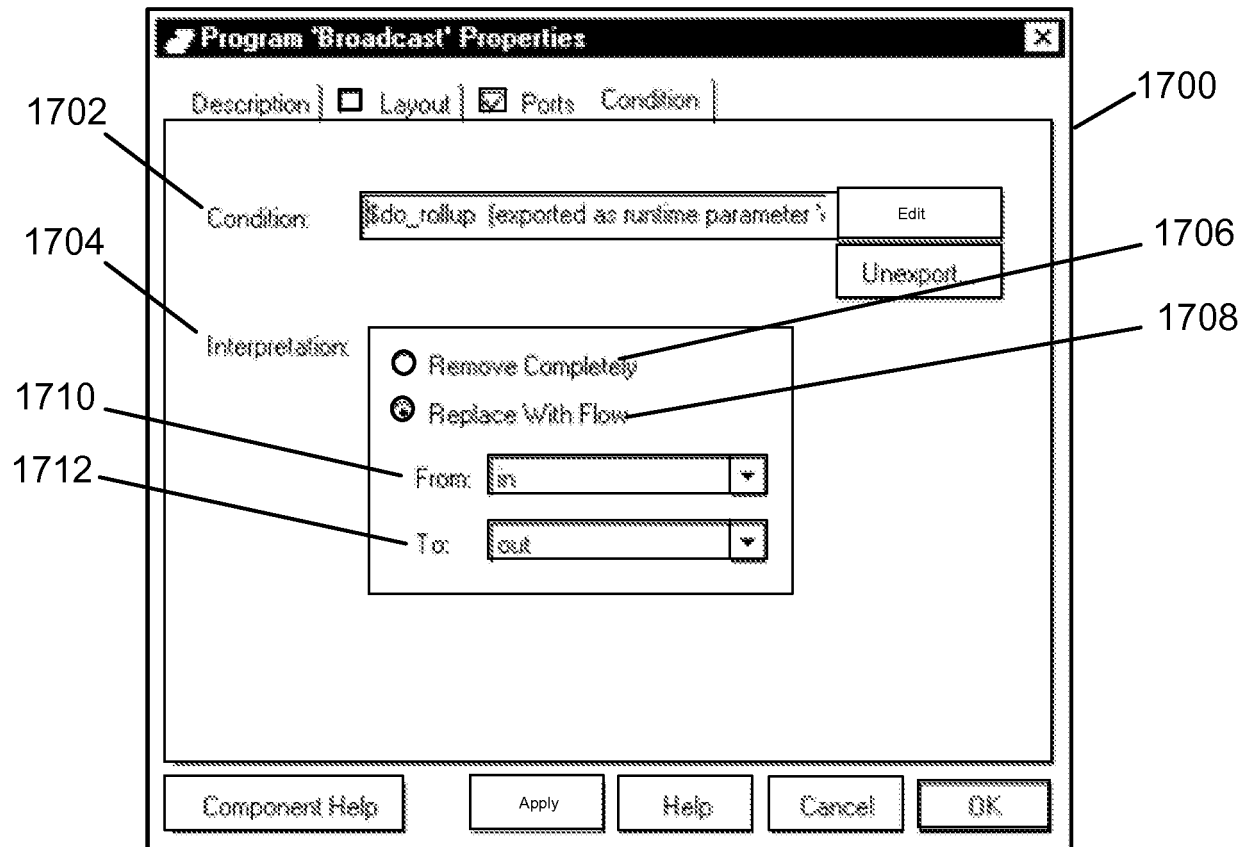
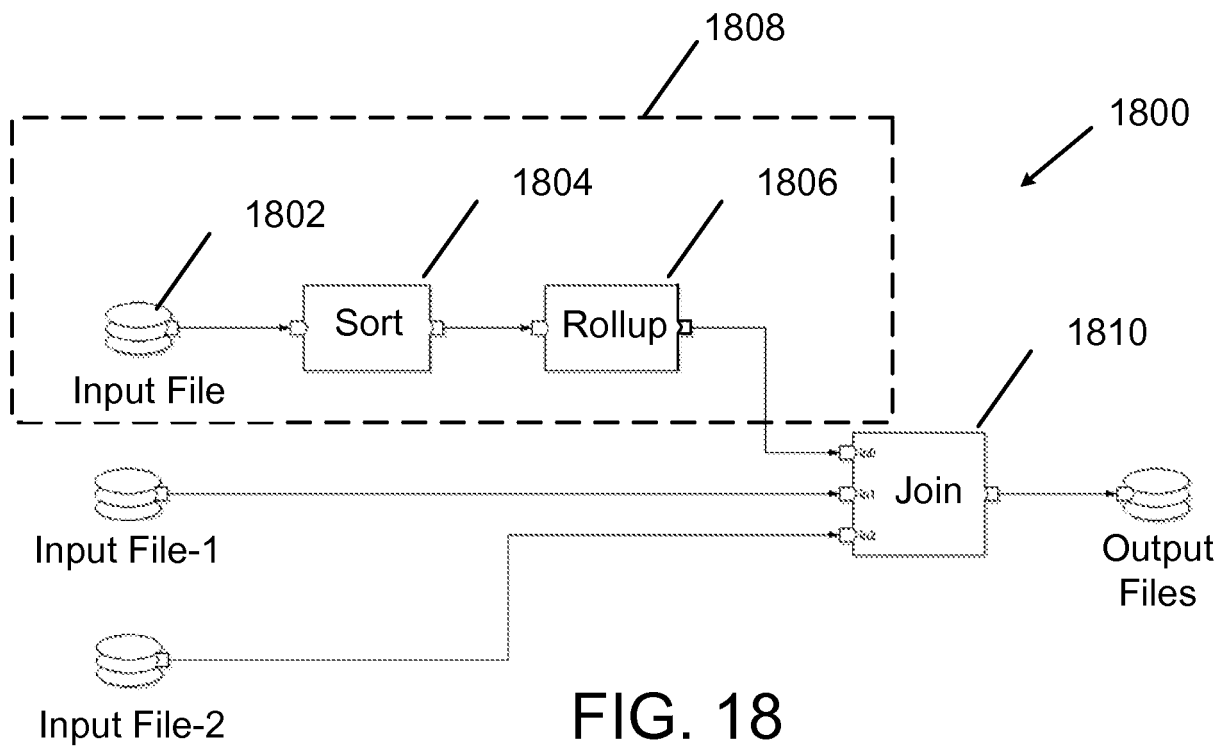


FIG. 17

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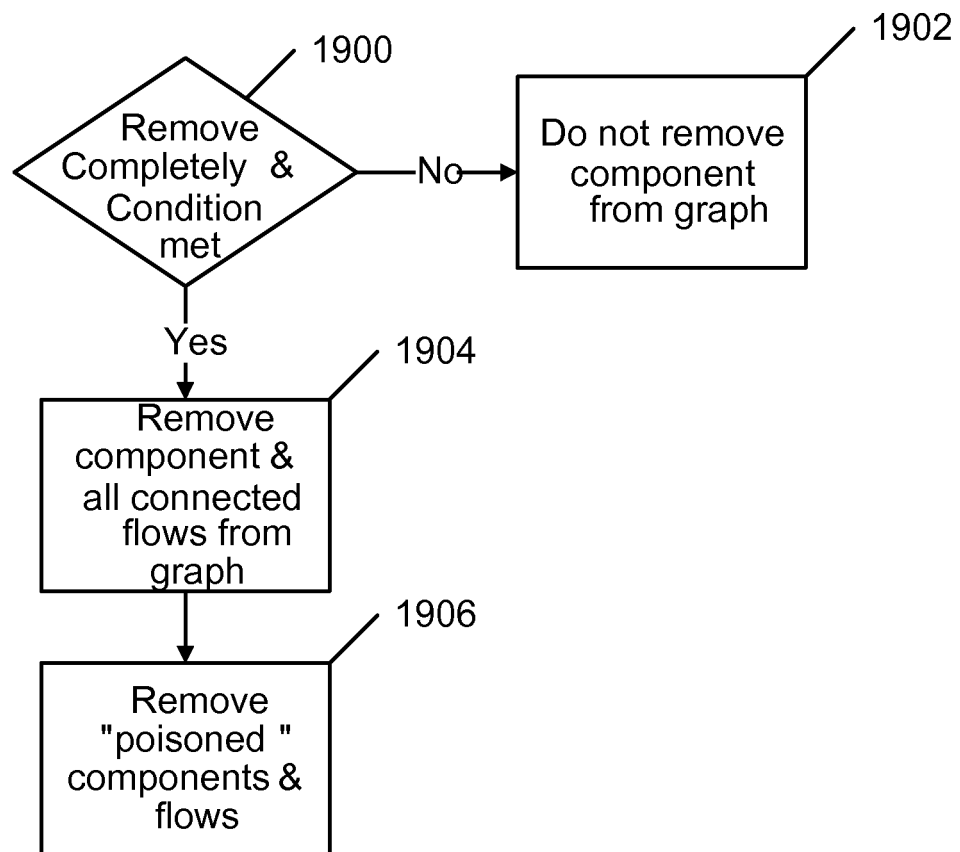


FIG. 19

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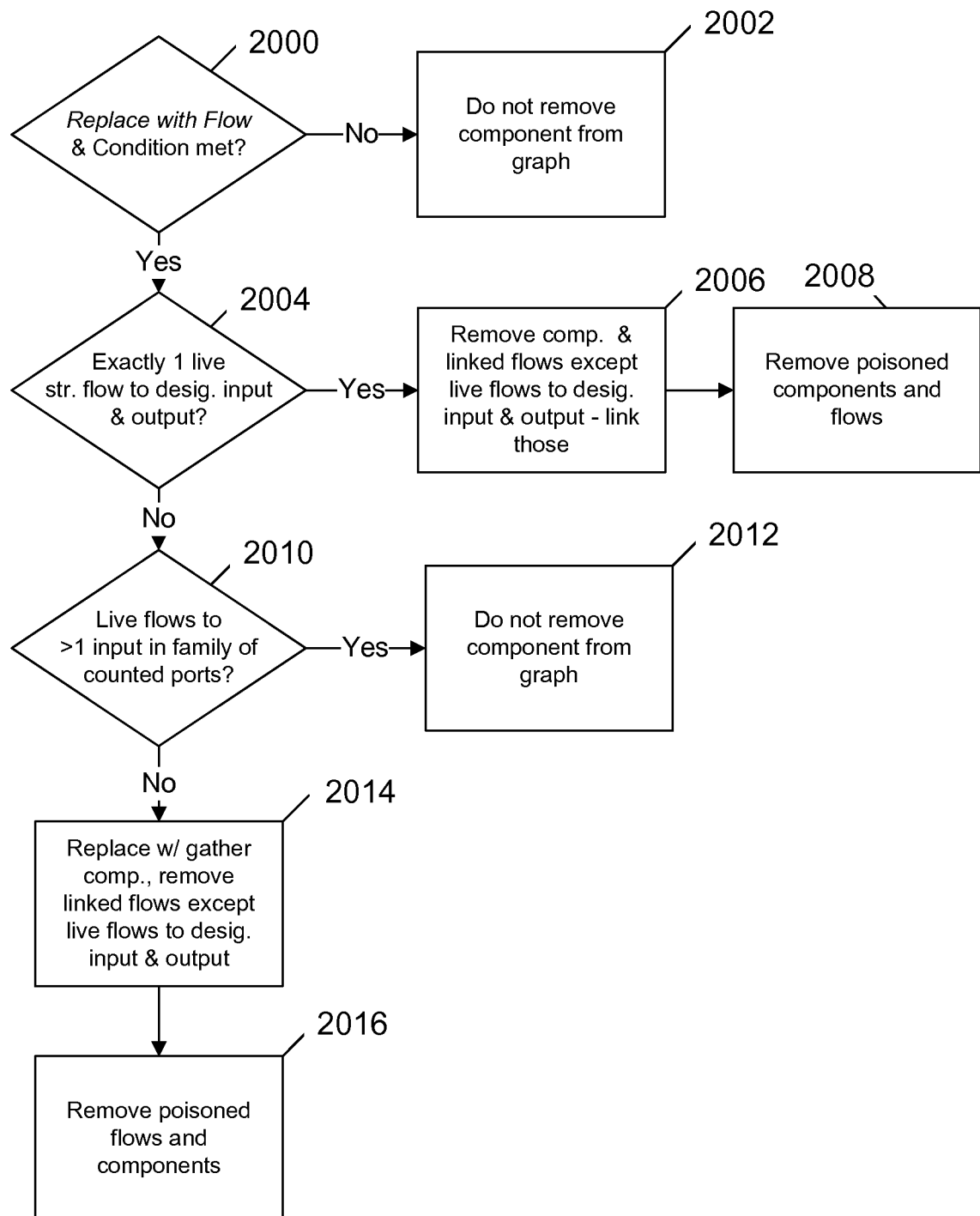


FIG. 20

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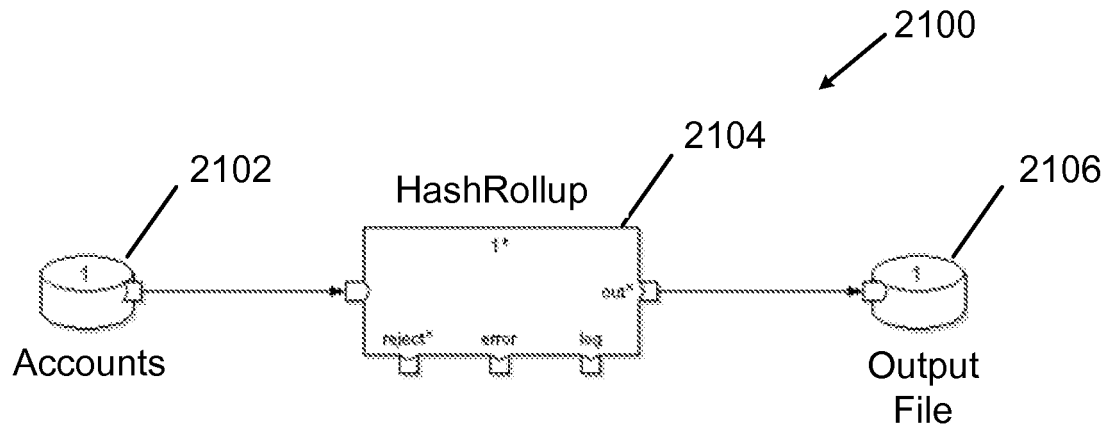


FIG. 21

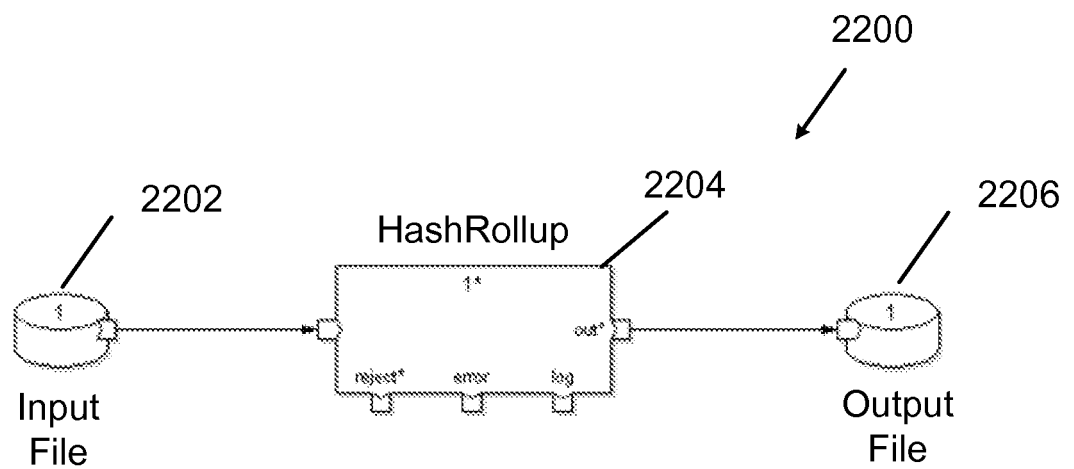


FIG. 22

2300

Name	Type	Loc	Default Value	Description	Kind
input_rpath	String		\${prompt_for "rpath, inplace"}	Input dataset rpath	CBL
input_path	String		\${(dataset_url \$input_rpath)}		CBL
input_format	Record Format	End	\${(dataset_type \$input_rpath)}		CBL
rollup_key	Collator		\${(prompt_for "key", \$input_format)}	Key to rollup by	CBL
rollup_transform	Transform	End	\$(prompt_for "rollup", \$input_format, \$rollup_key)	Rollup rules	CBL
output_format	Record Format	End	\$(find_in \$rollup_transform, "result_type")		CBL
output_path	String		\$(prompt_for "text, inplace", 35)	Output path	CBL

OK

Cancel

Help

OK

FIG. 23

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2400

2402

Input dataset repository path

Browse

2404

Key to rollup by

Unset

Edit

2406

Rollup rules

No rules

Edit

2408

Output path

FIG. 24A

2400

2402

Input dataset repository path

2410

/Schema/Warehouse/CallDetail

Browse

2404

Key to rollup by

dt

2412

Edit

2406

Rollup rules

max(duration) ⇒ max_duration
min(duration) ⇒ min_duration
#records ⇒ num_calls

2414

Edit

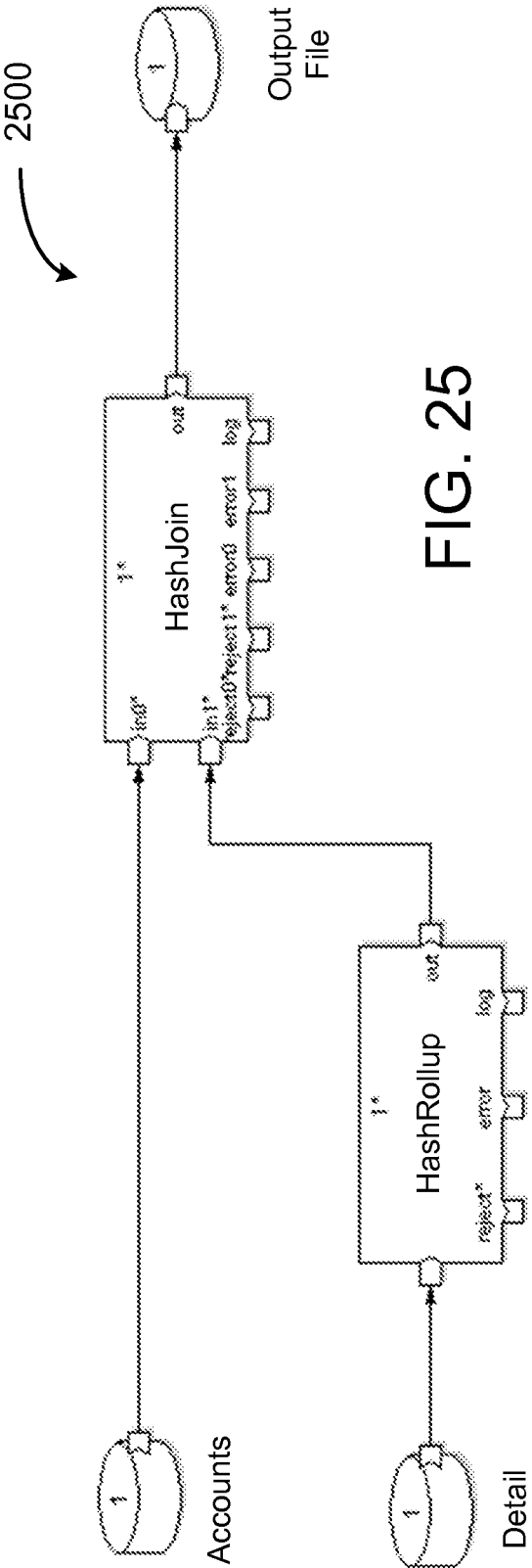
2408

Output path

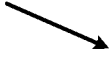
results.dat

2416

FIG. 24B



2600



Name	Type	Loc	Default Value	Description	Kin
rollup_transform	Transform	Emb	\$(prompt_for "rollup,inplace", \$(dataset_type "/Schema/Warehouse/CallPet", "acct_no")	Detail rollup rules	CDL
rollup_format	Record Format	Emb	\$(find_in \$rollup_transform, "result_type")		CDL
join_transform	Transform	Emb	\$(xfr_for_join "join", \$(dataset_type "/Schema/Warehouse/Accounts", \$rollup_format)		CDL
join_format	Record Format	Emb	\$(type_join \$(dataset_type "/Schema/Warehouse/Accounts", \$rollup_format)		CDL
output_path	String		\$(prompt_for "text,inplace", 35)	Output path	CDL

Help

Cancel

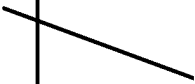
OK

FIG. 26

2700



2702



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Compute		Source field	Expression	Where	Output
<input type="text"/>	<input type="text"/>	value of <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	value of <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	value of <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	value of <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	value of <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Detail
rollup
rules

Output
path

FIG. 27

2800

2802

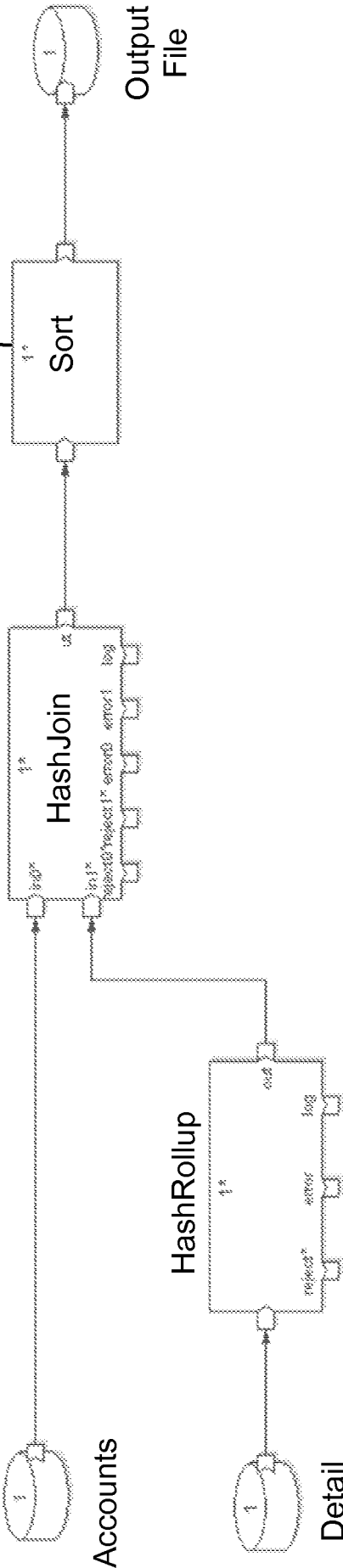


FIG. 28

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2900

Graph 'parameterized-rollup-join-sort' Run Parameters

Name	Type	Loc	Default Value	Description	Kind
rollup_transform	Transform	Emb	\$(prompt_for "rollup, inplace", \$(dataset_type "/Schema/Warehouse/CallDetail"), "acct_no")	Detail rollup rules	CBL
rollup_format	Record Format	Emb	\$(find_in \$(rollup_transform, "result_type")		CBL
join_transform	Transform	Emb	\$(xft_for_join "join", \$(dataset_type "/Schema/Warehouse/Accounts"), \$(rollup_format)		CBL
join_format	Record Format	Emb	\$(type_join \$(dataset_type "/Schema/Warehouse/Accounts"), \$(rollup_format)		CBL
do_sort	String		\$(prompt_for "radio", \$(list "true", "false"), \$(list "yes", "no"))	Should the data be sorted? CBL	CBL
sort_key	Collator		\$(if \$do_sort, \$(prompt_for "key", \$(join_format)))	Sort by key	CBL
output_path	String		\$(prompt_for "text, inplace", 35)	Output path	CBL

Help Cancel OK

FIG. 29

2910

2908

2904

2902

2906

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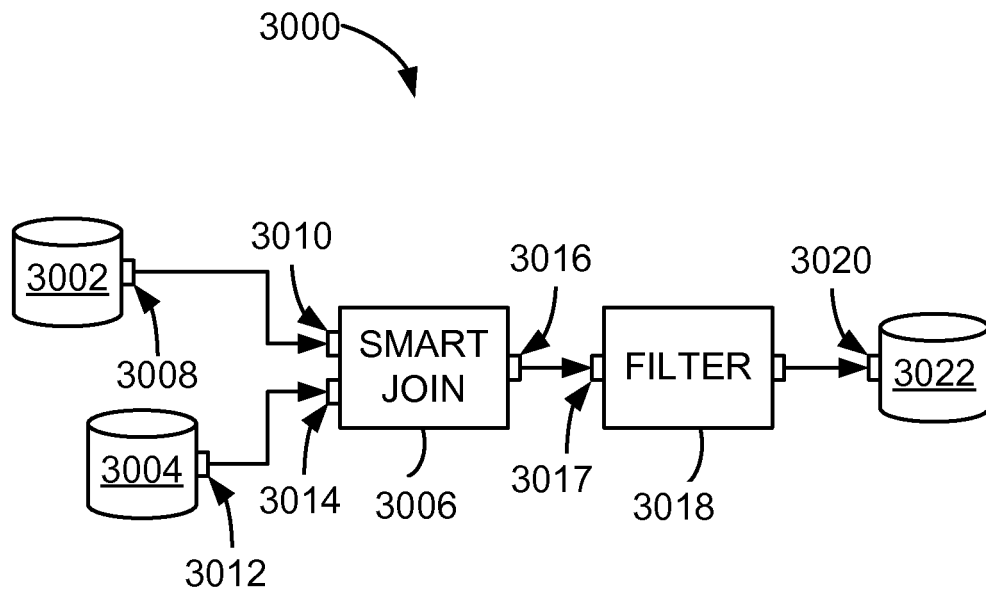


FIG. 30A

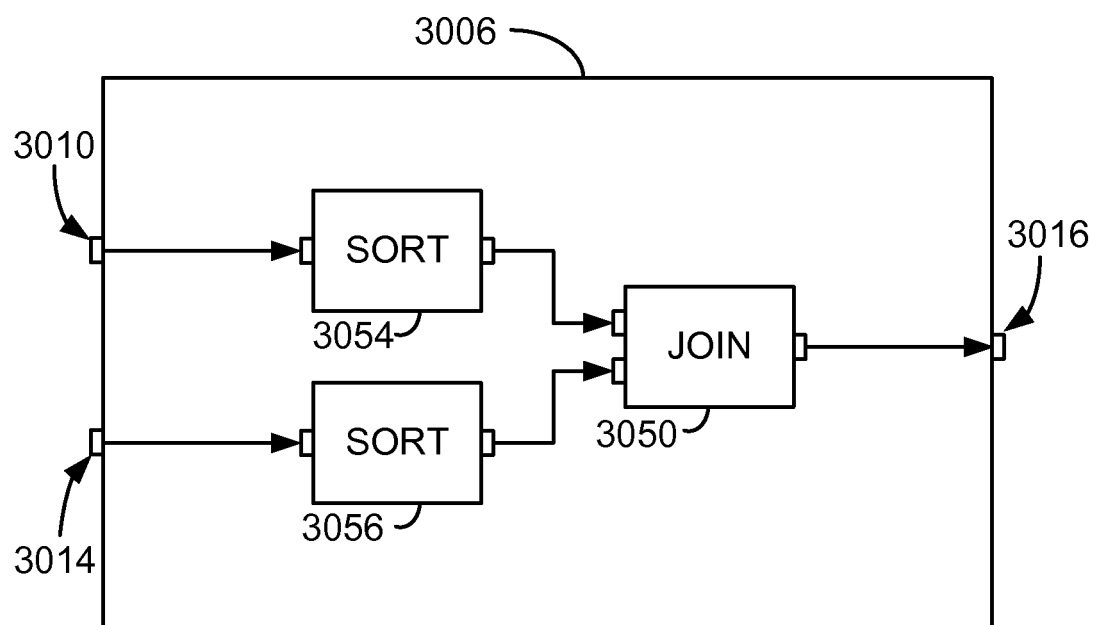


FIG. 30B

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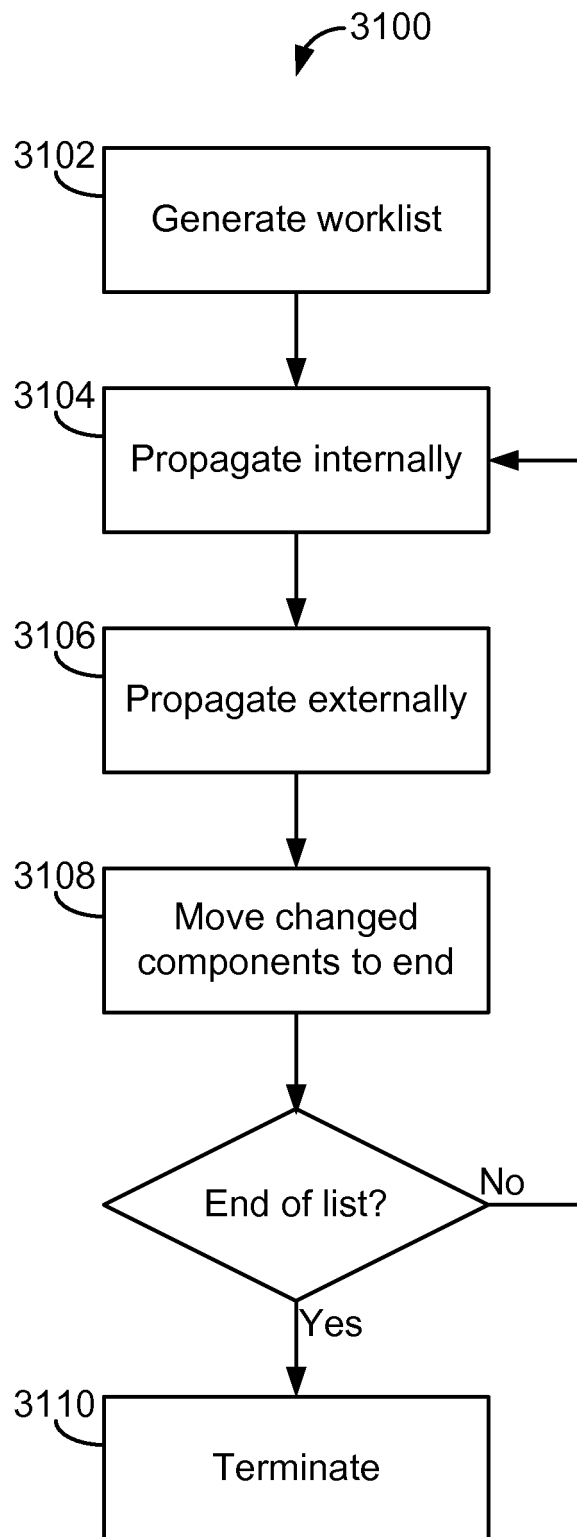
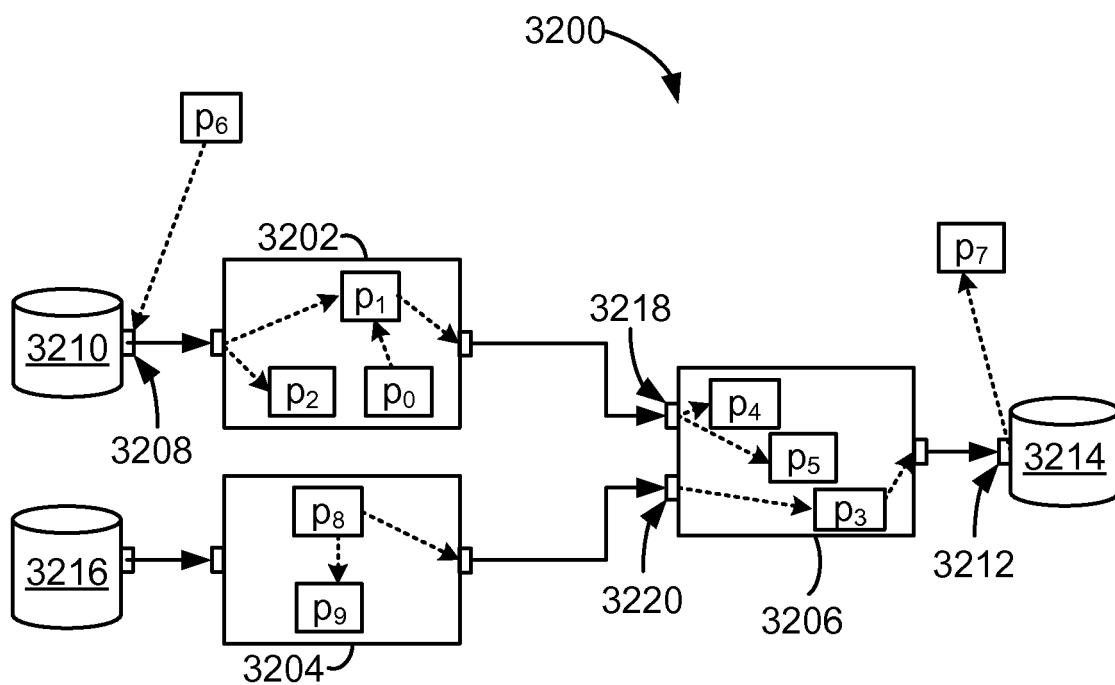
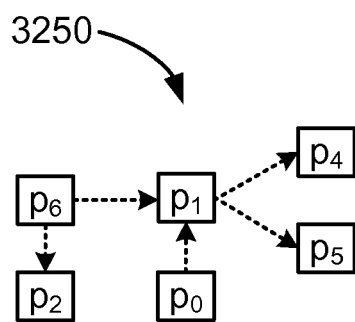
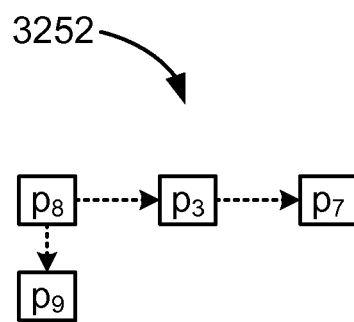


FIG. 31

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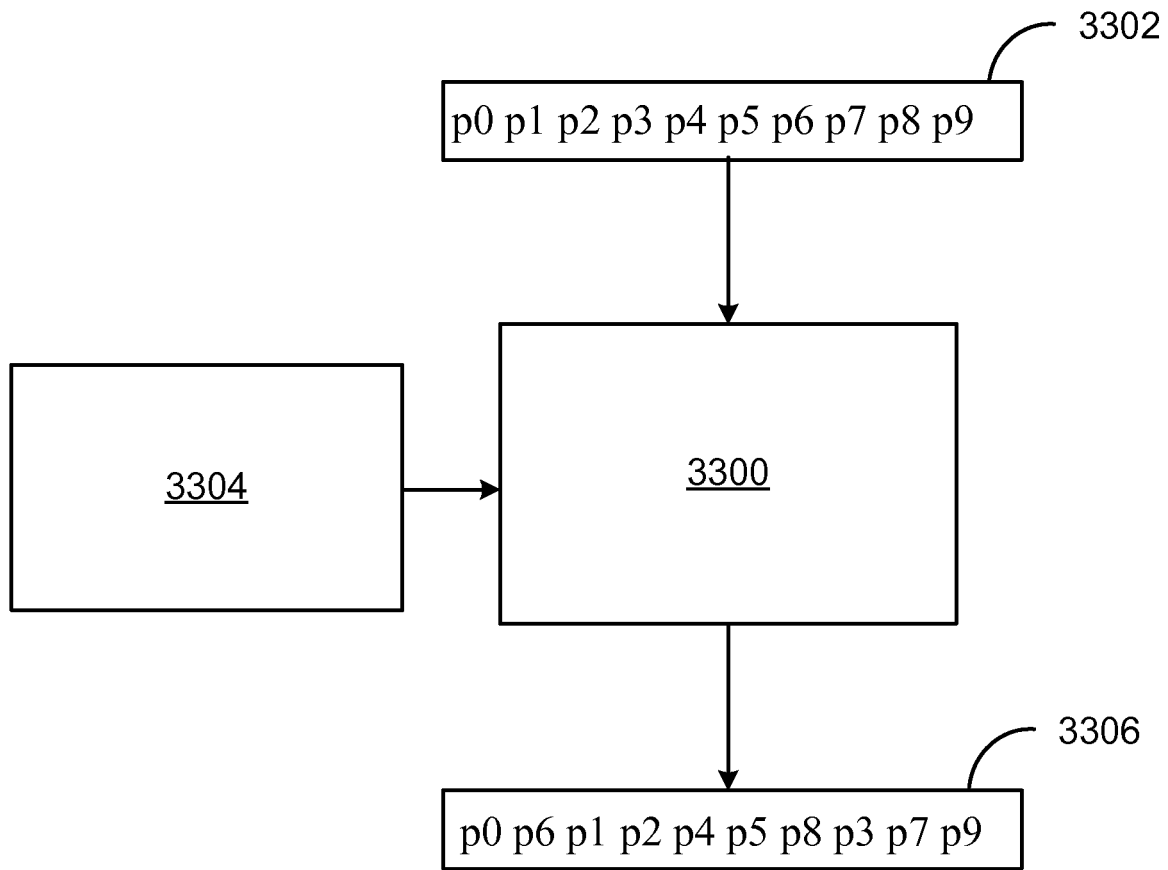


FIG. 33

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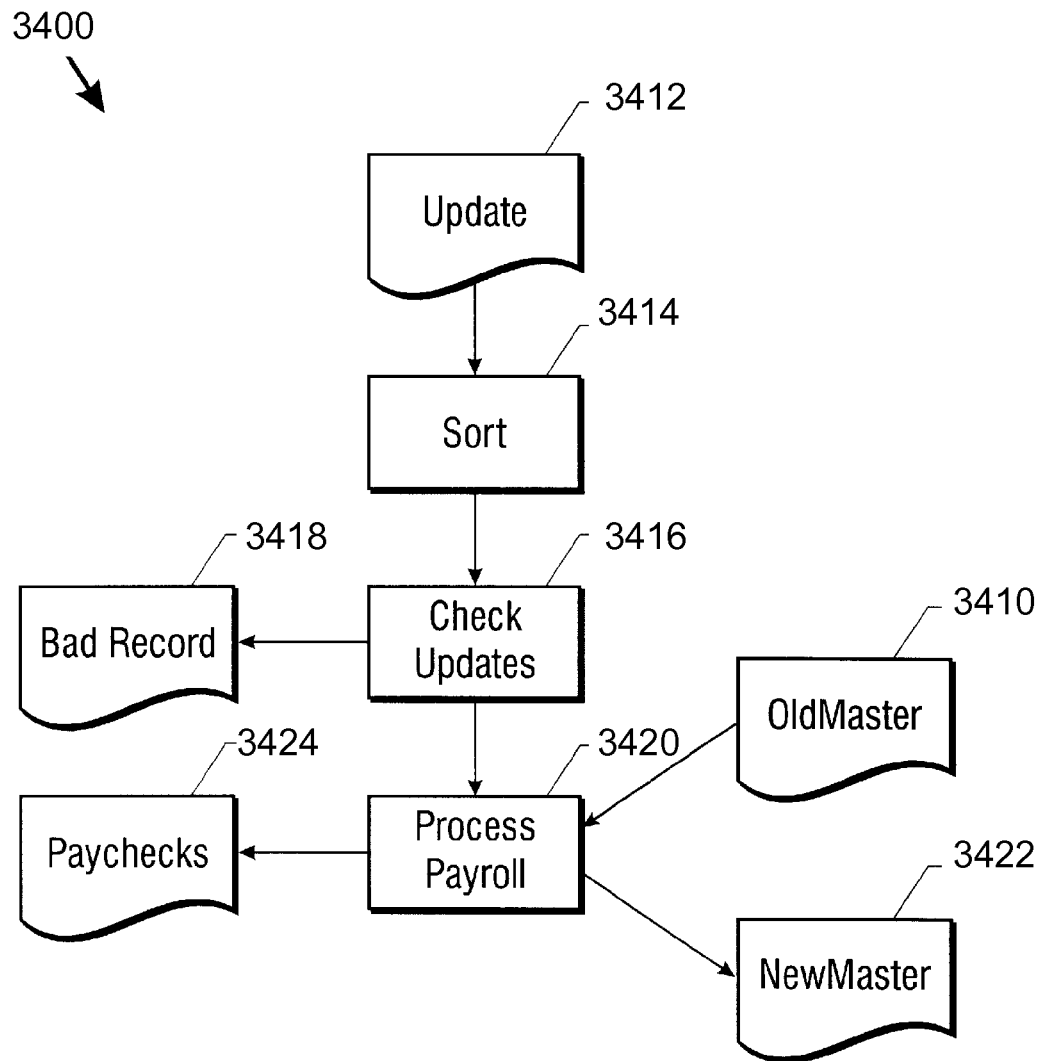


FIG. 34A

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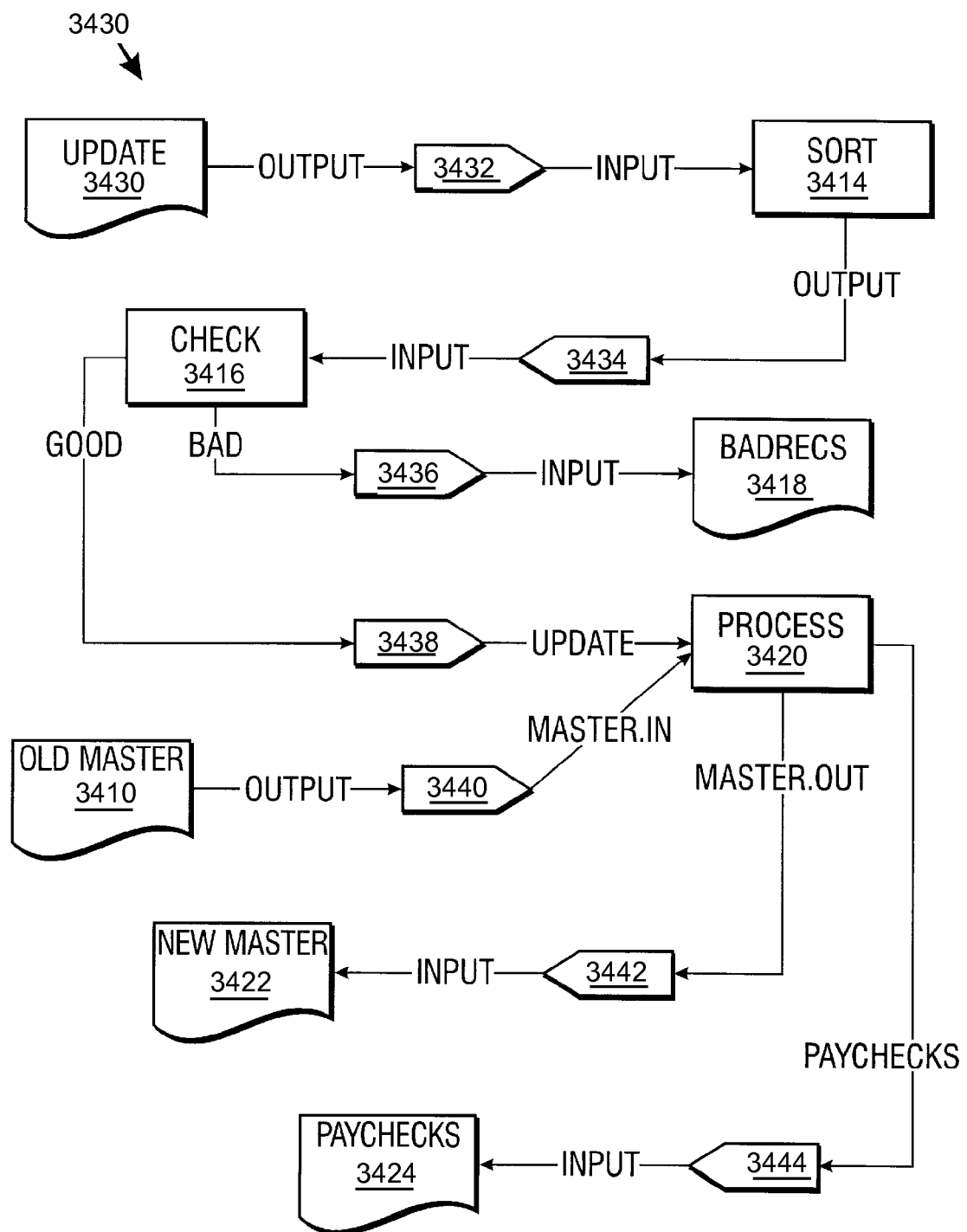


FIG. 34B

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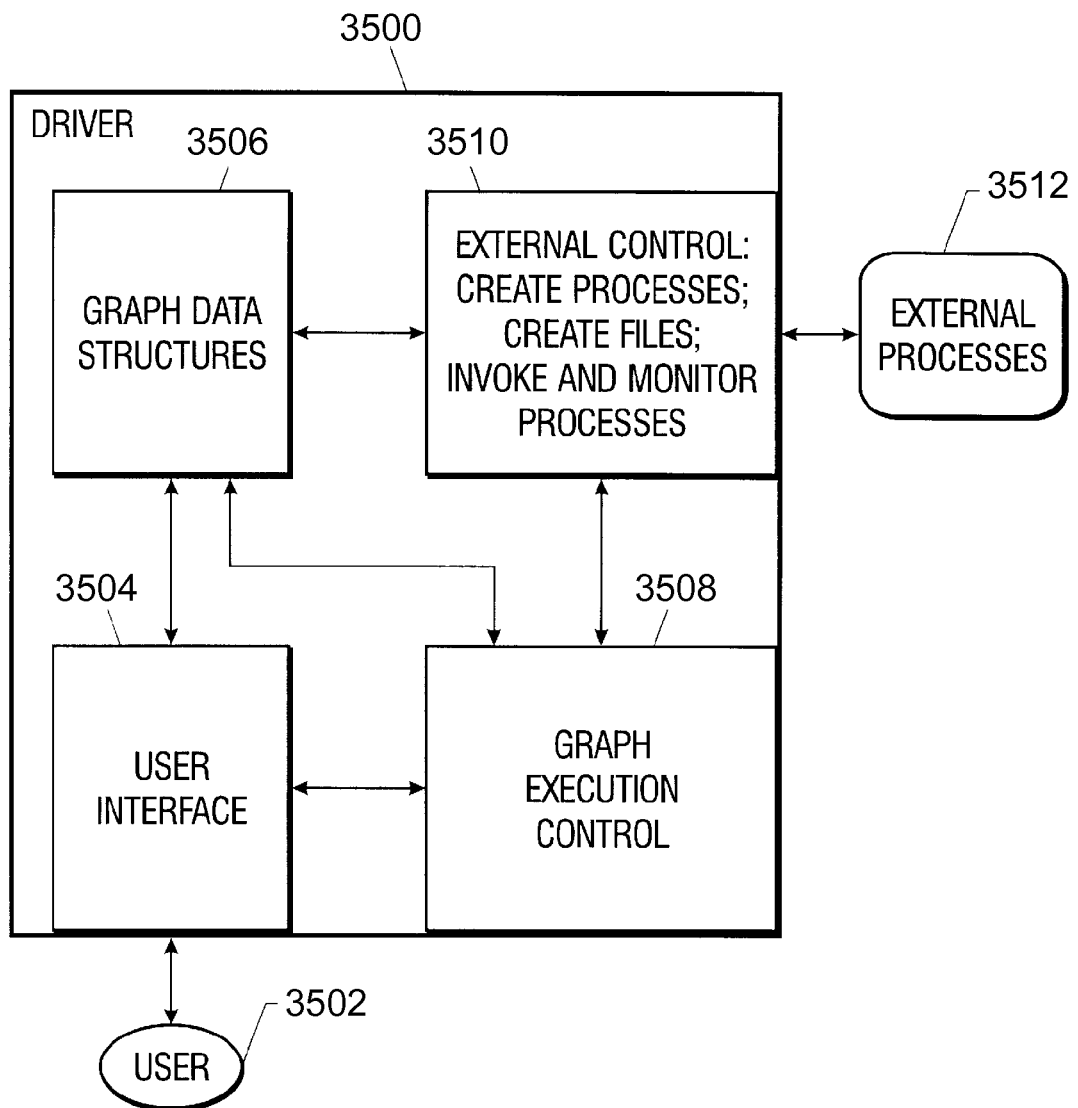


FIG. 35

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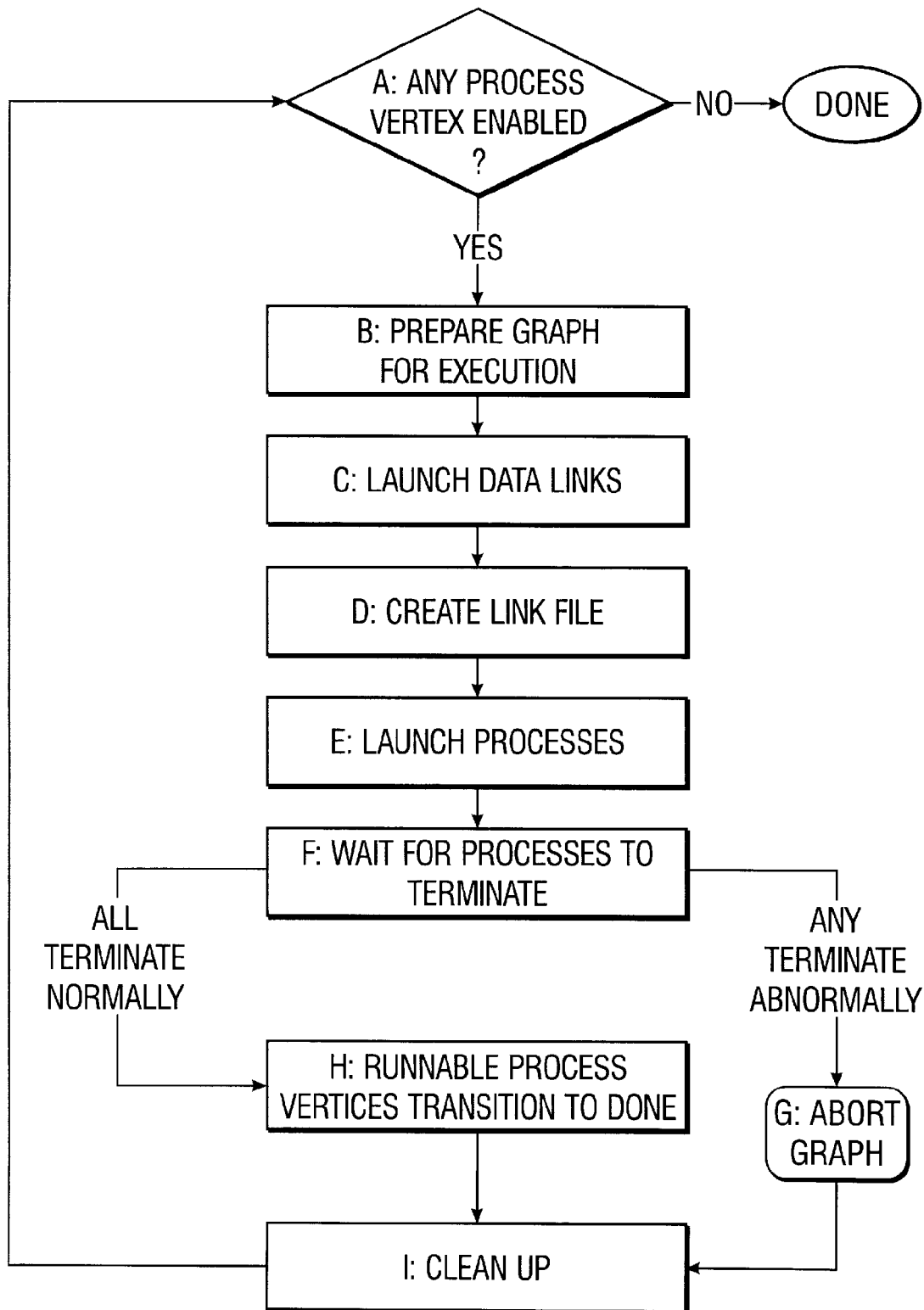


FIG. 36

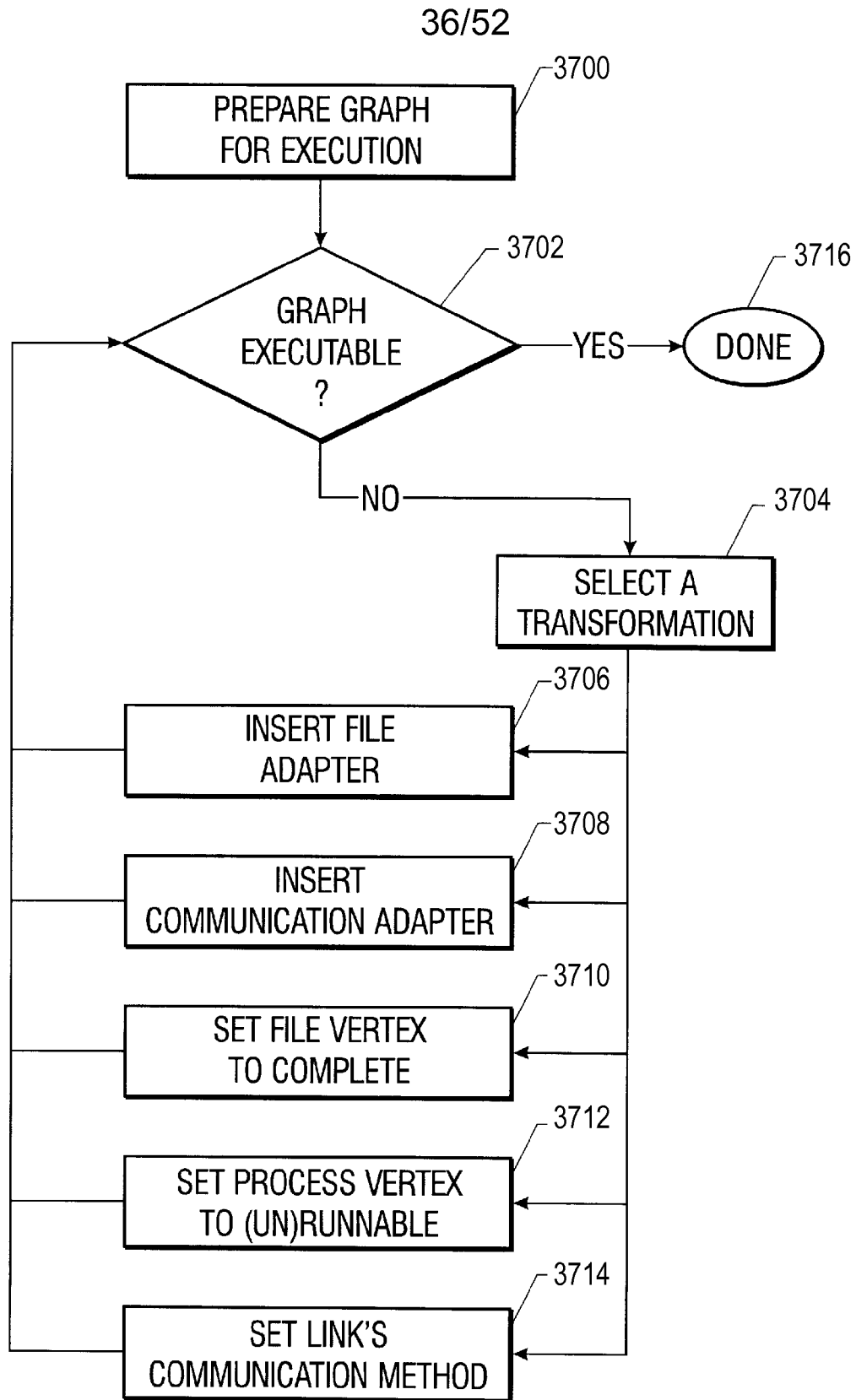


FIG. 37A

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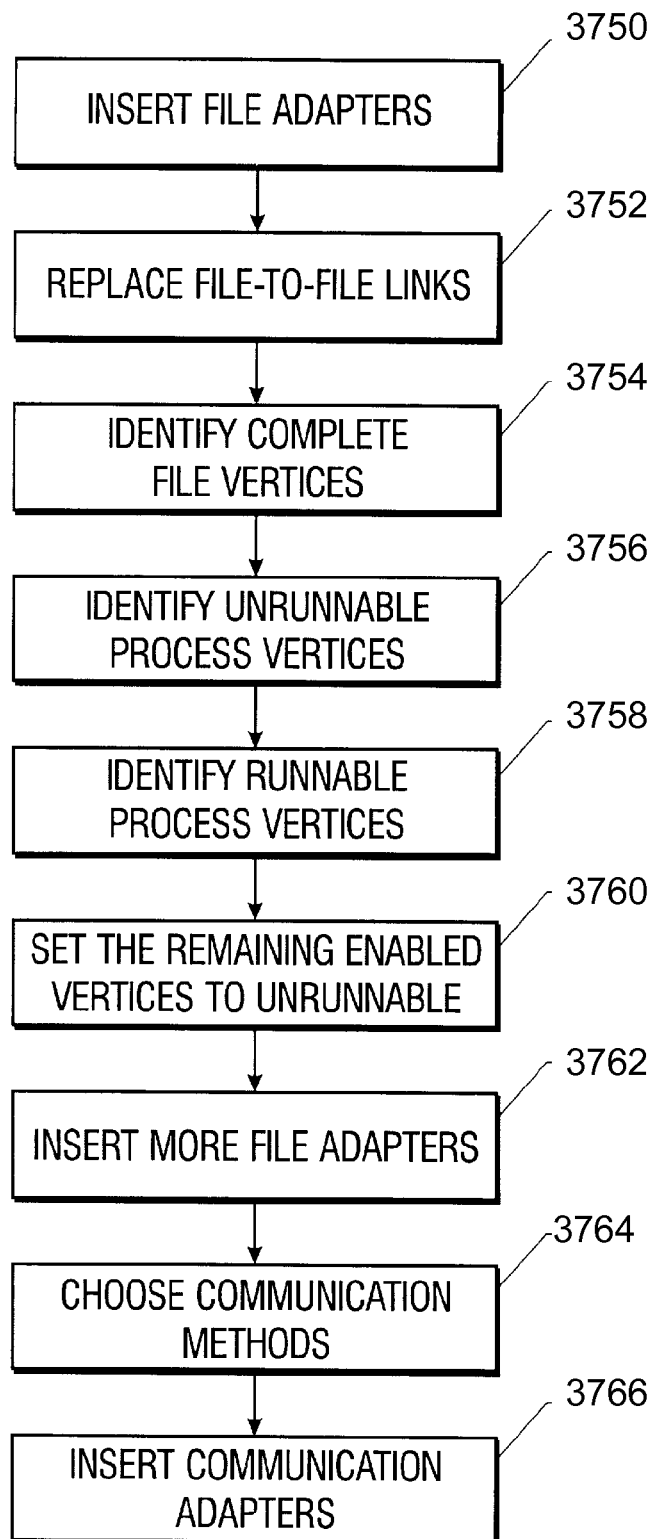


FIG. 37B

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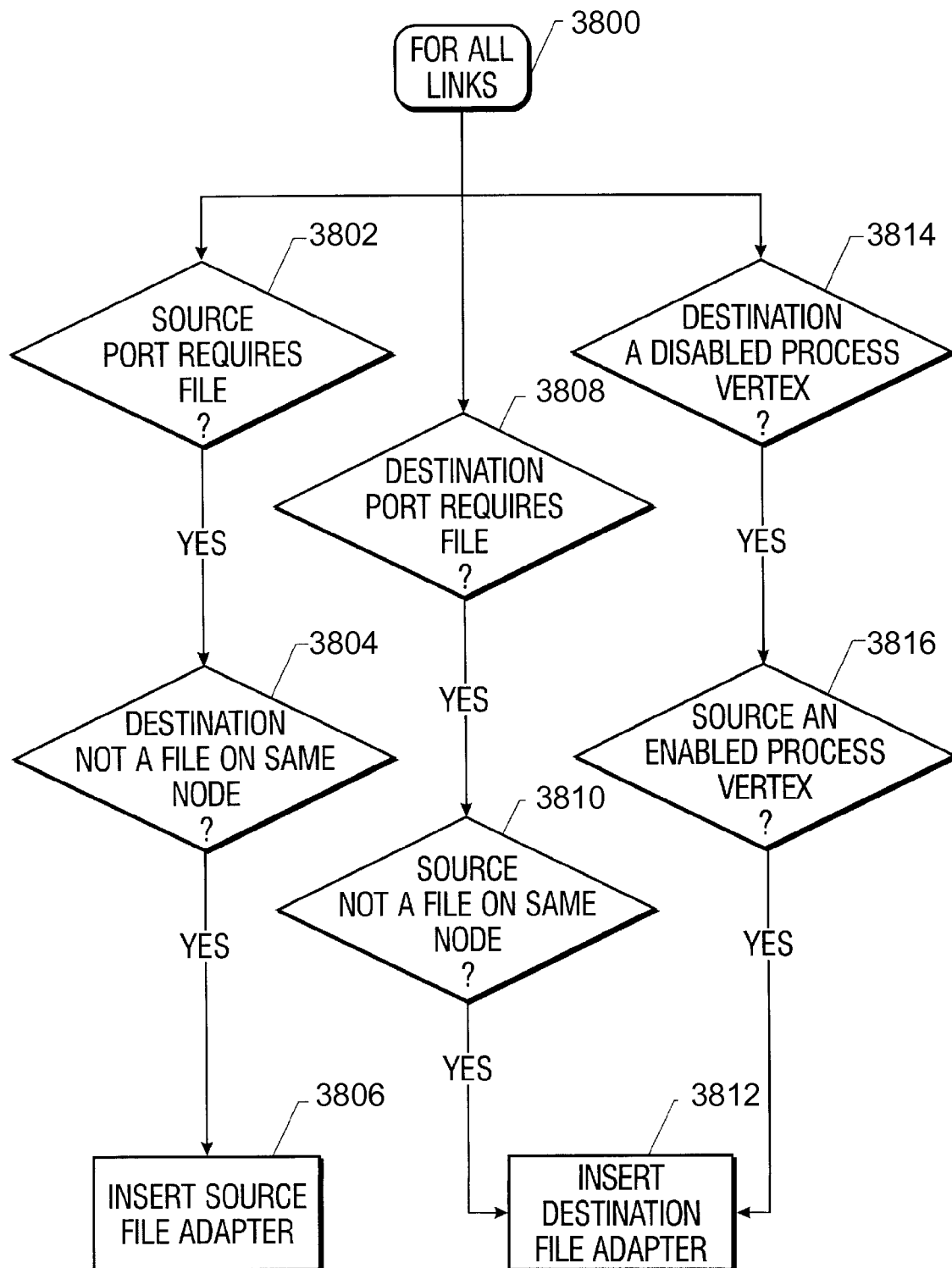


FIG. 38A

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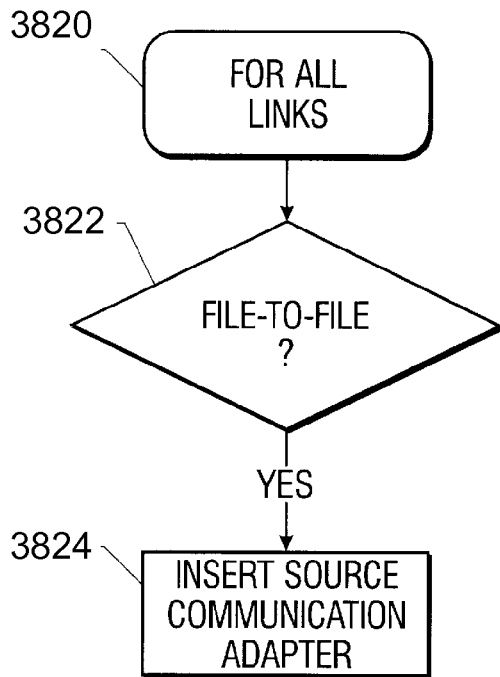


FIG. 38B

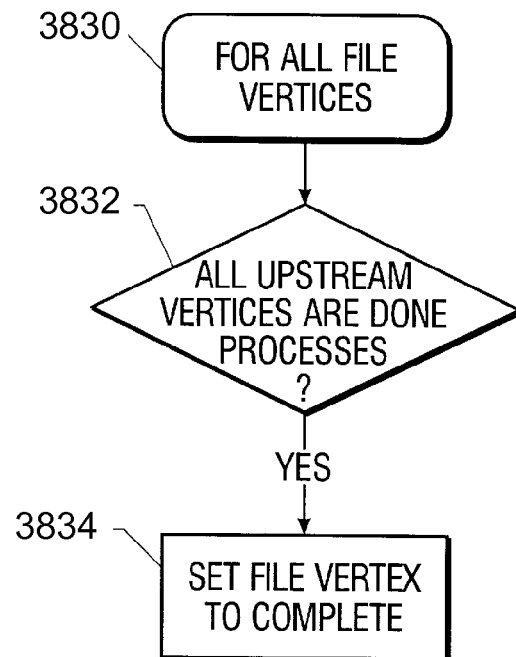


FIG. 38C

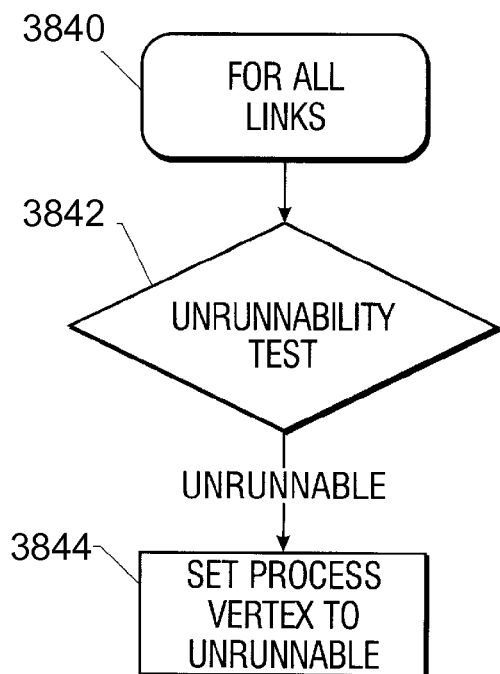


FIG. 38D

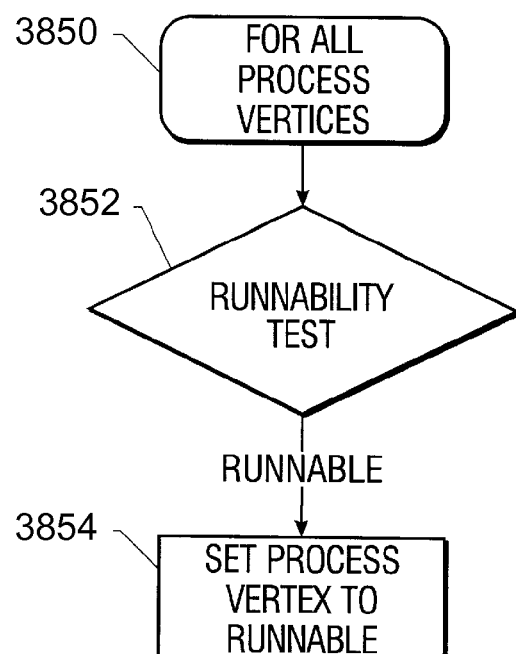


FIG. 38E

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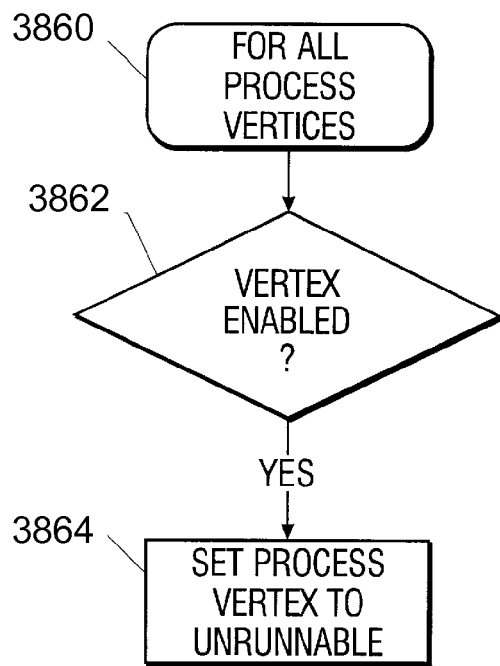


FIG. 38F

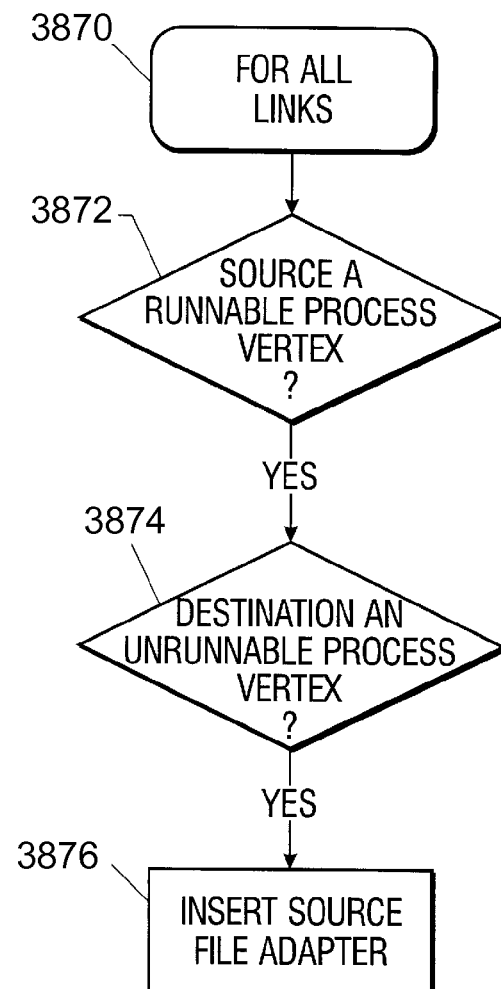


FIG. 38G

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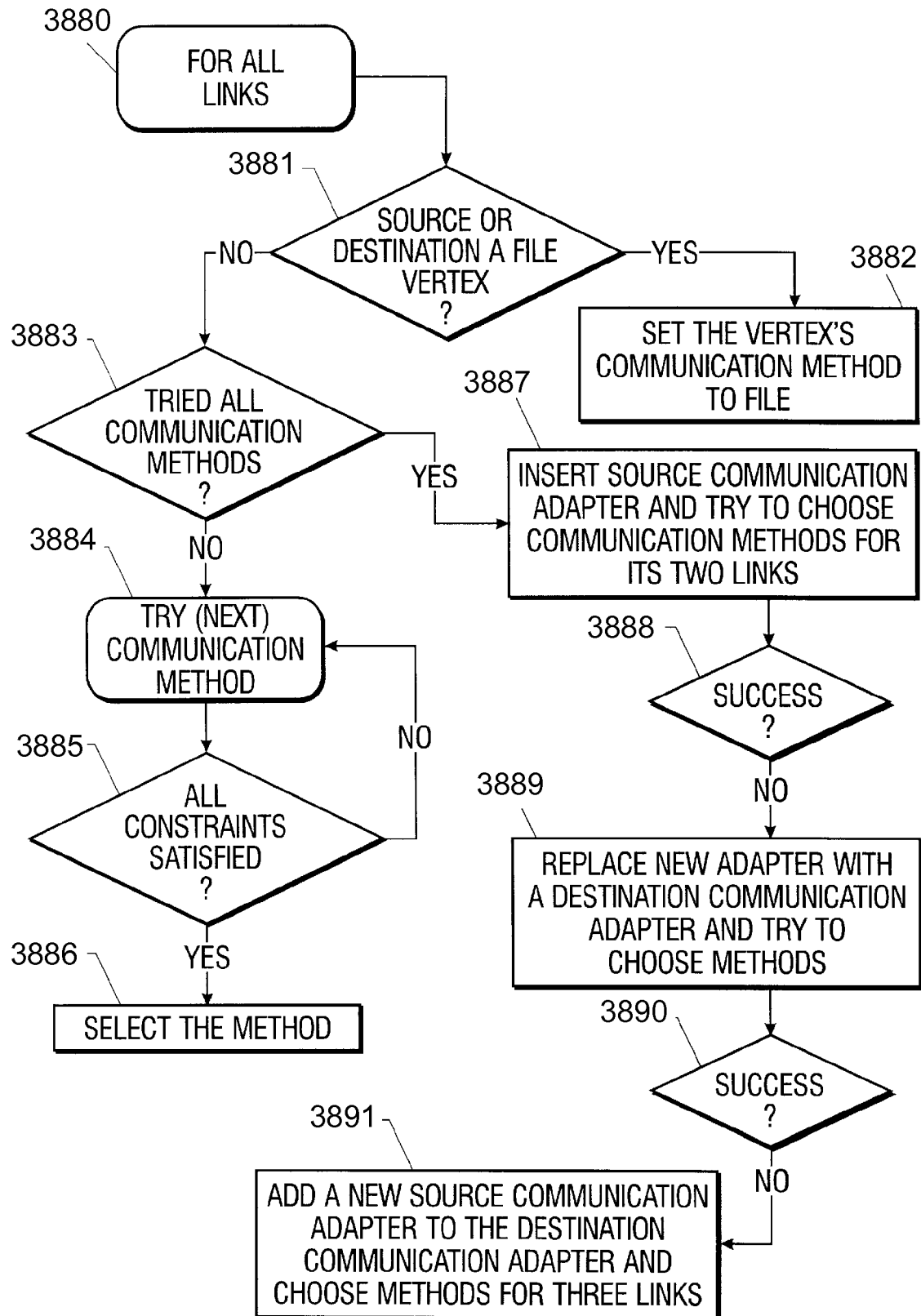


FIG. 38H

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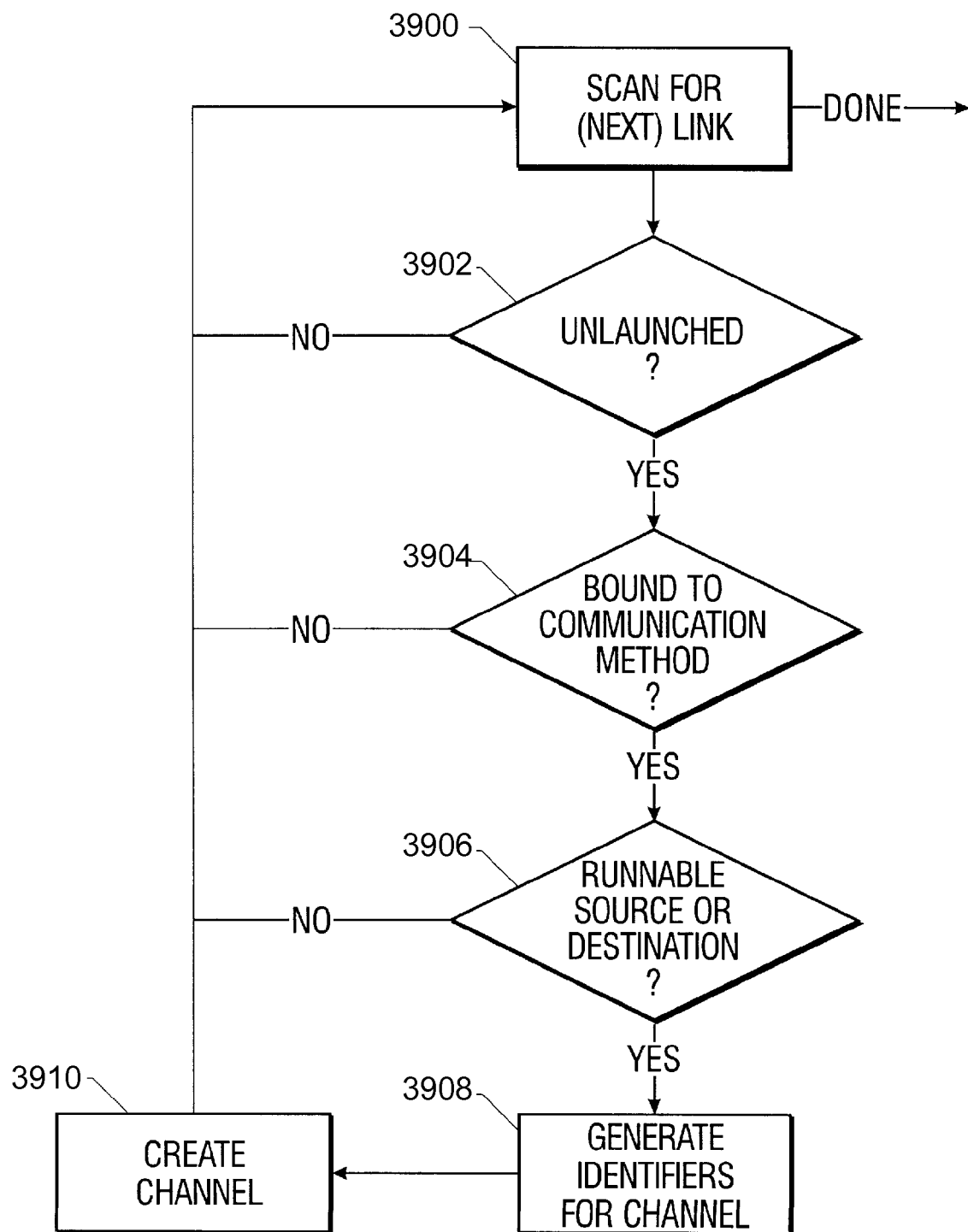


FIG. 39

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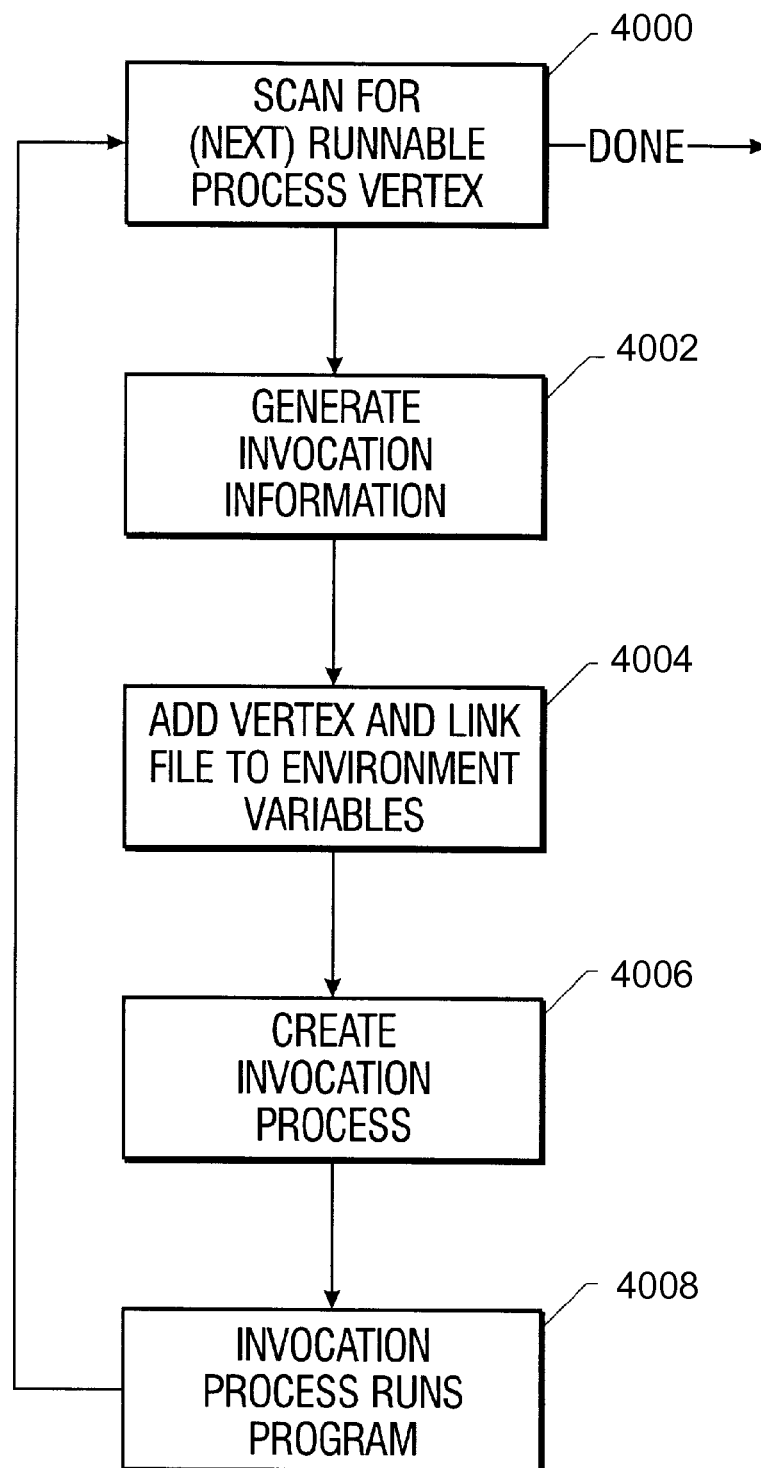


FIG. 40

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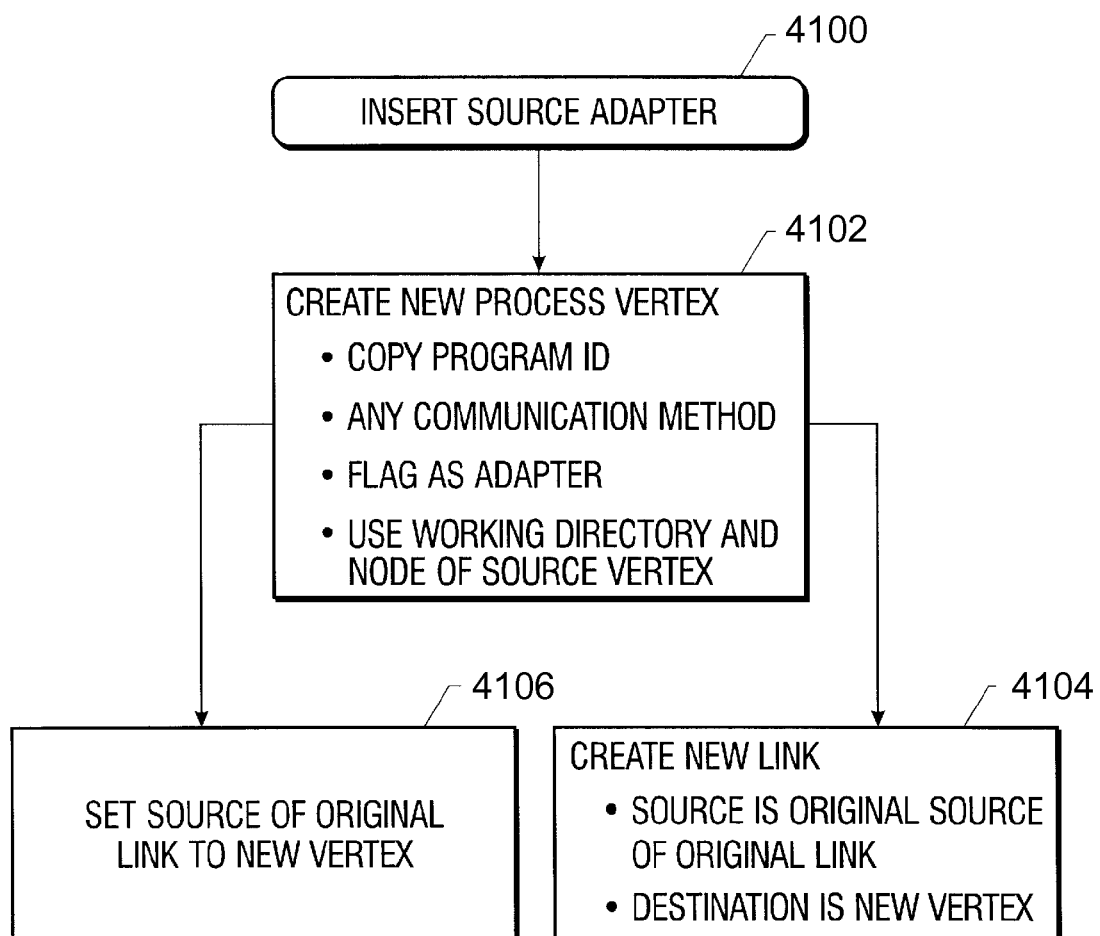


FIG. 41

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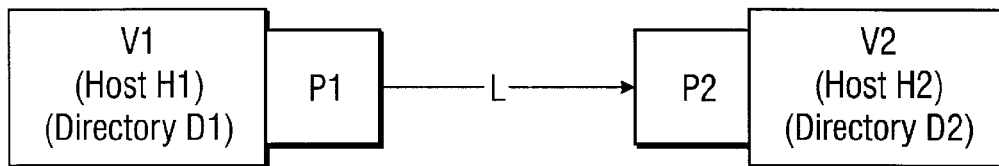


FIG. 42A

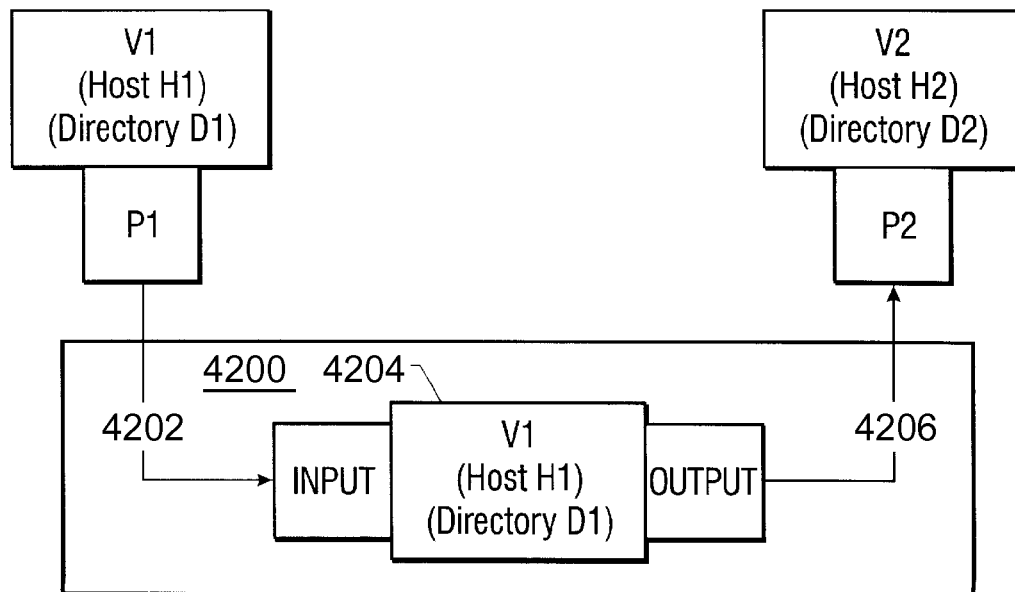


FIG. 42B

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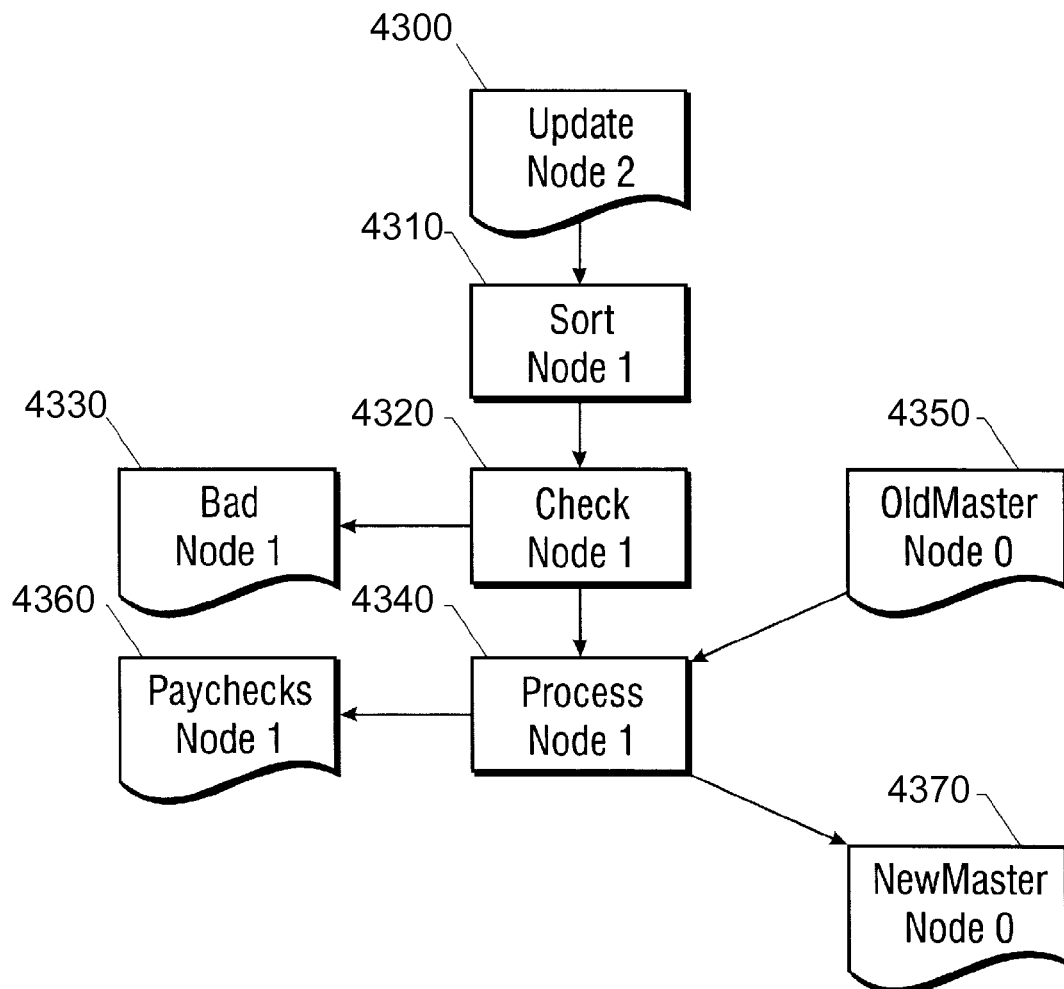


FIG. 43

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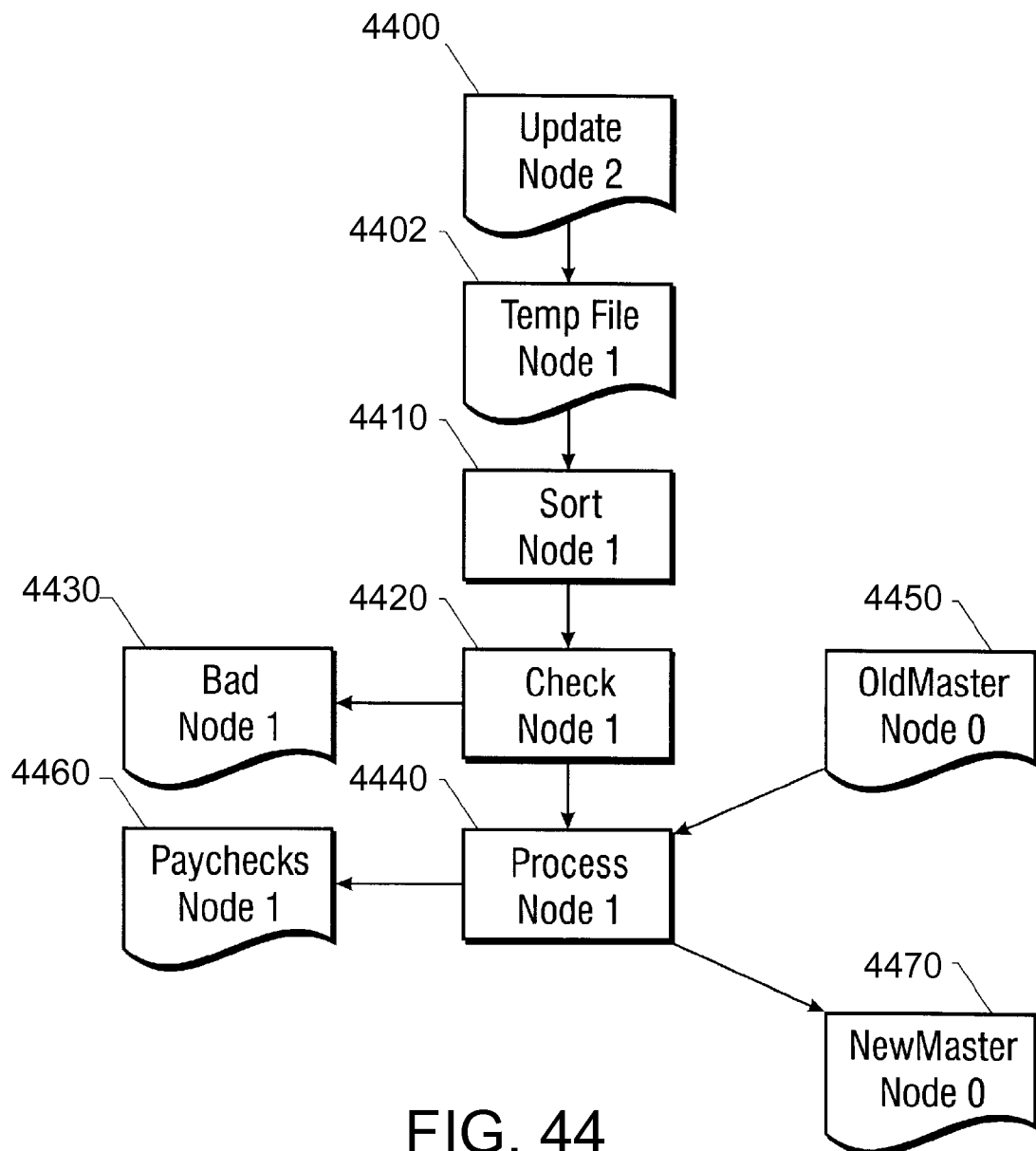


FIG. 44

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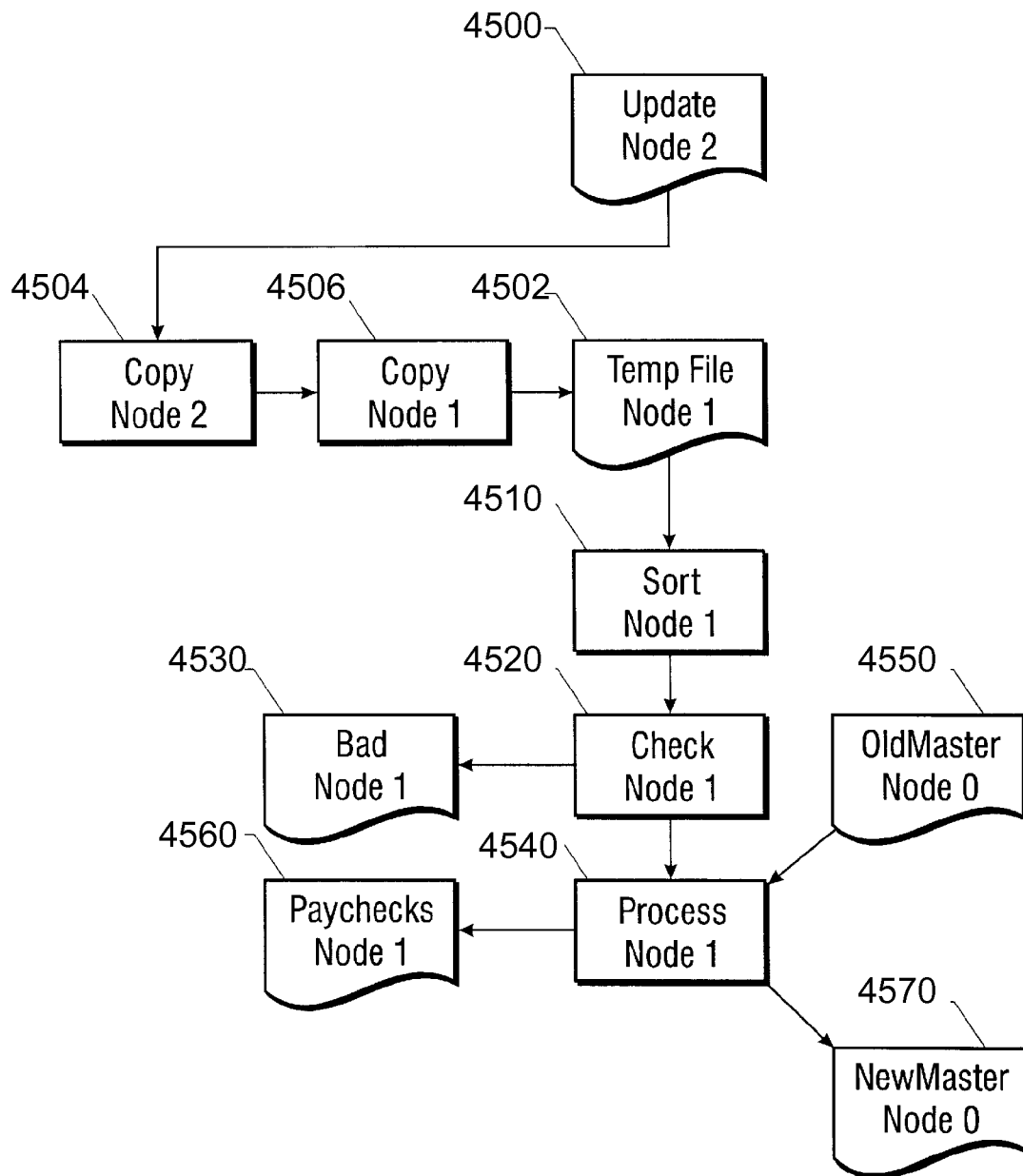


FIG. 45

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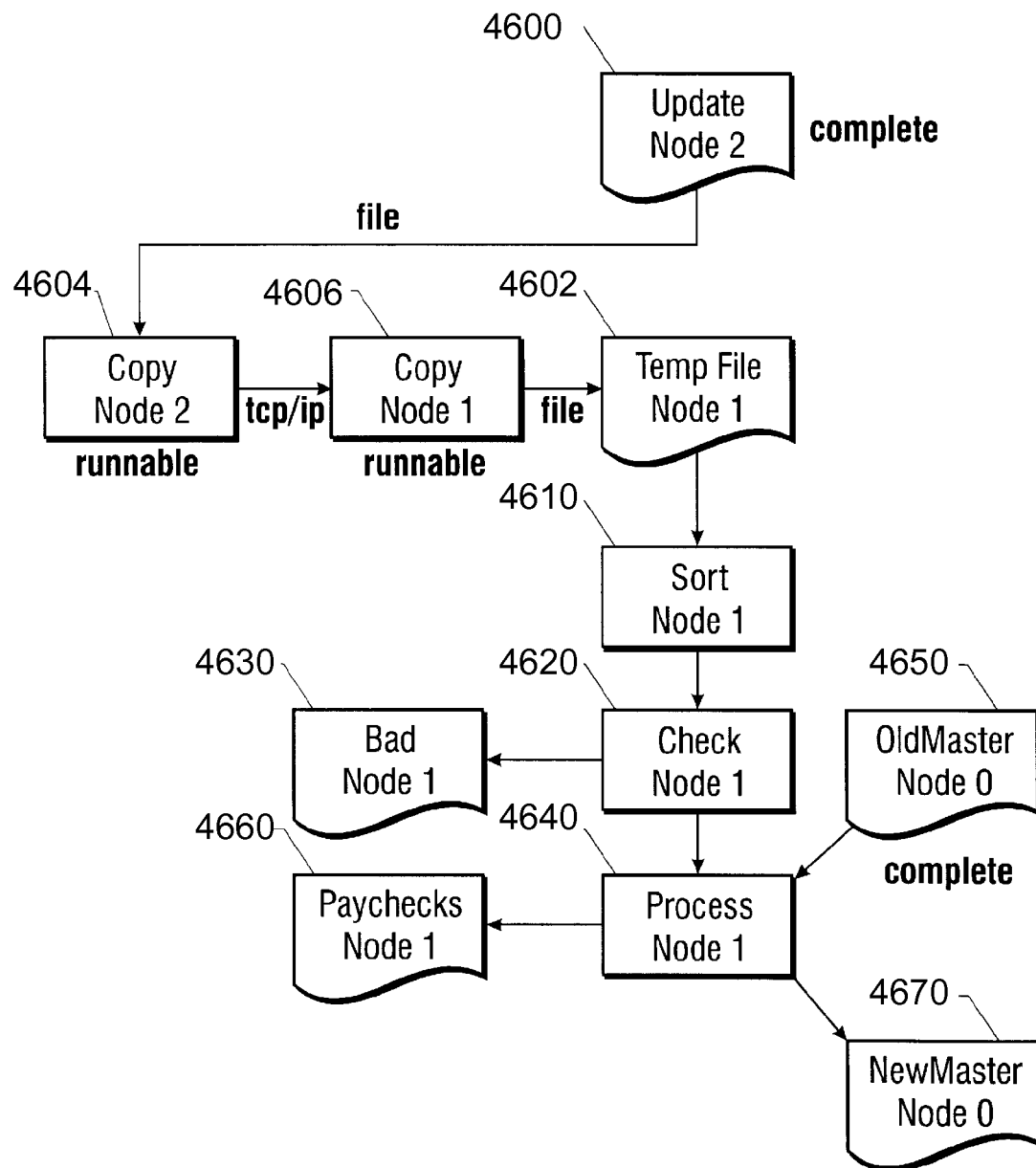


FIG. 46

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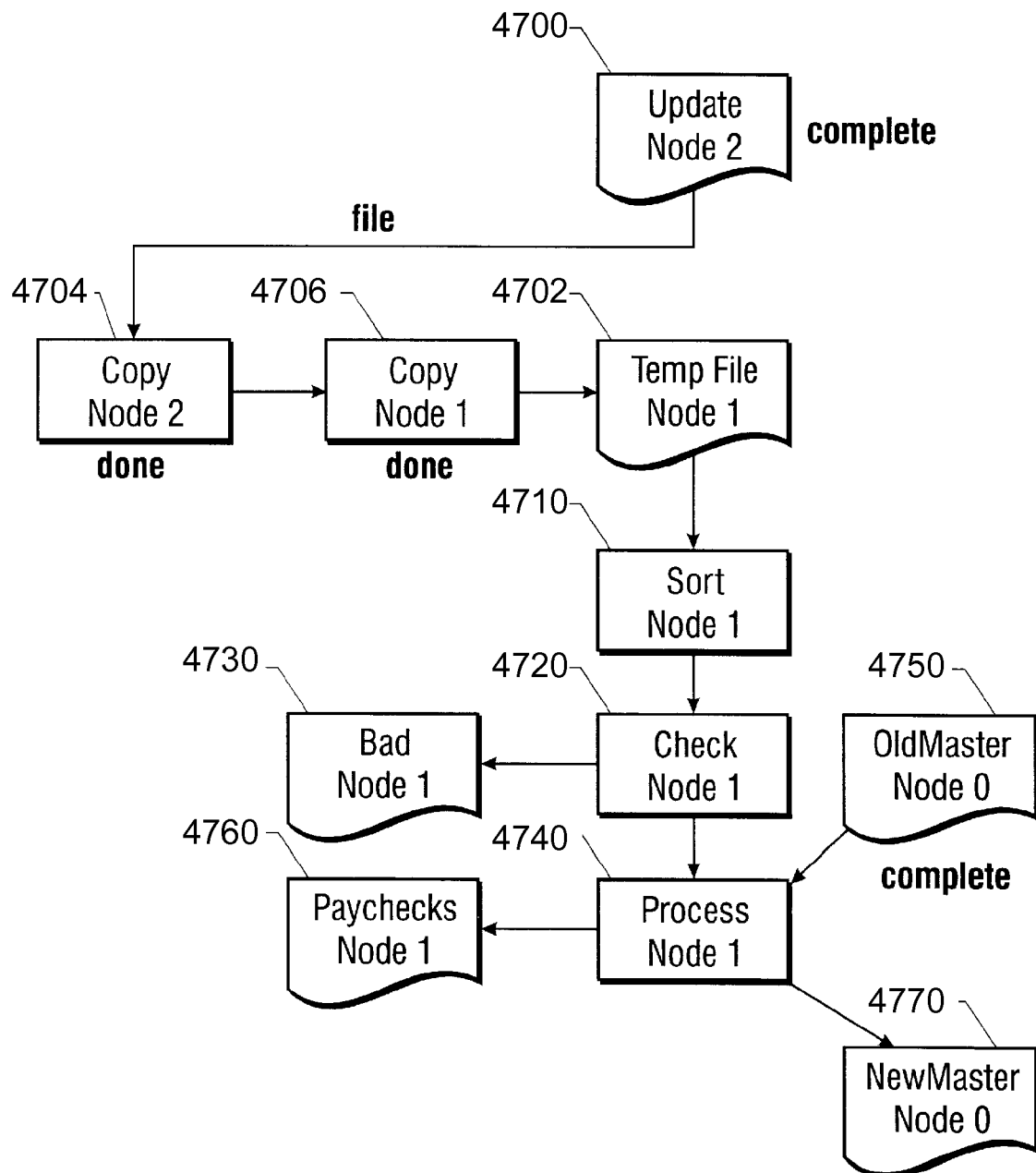


FIG. 47

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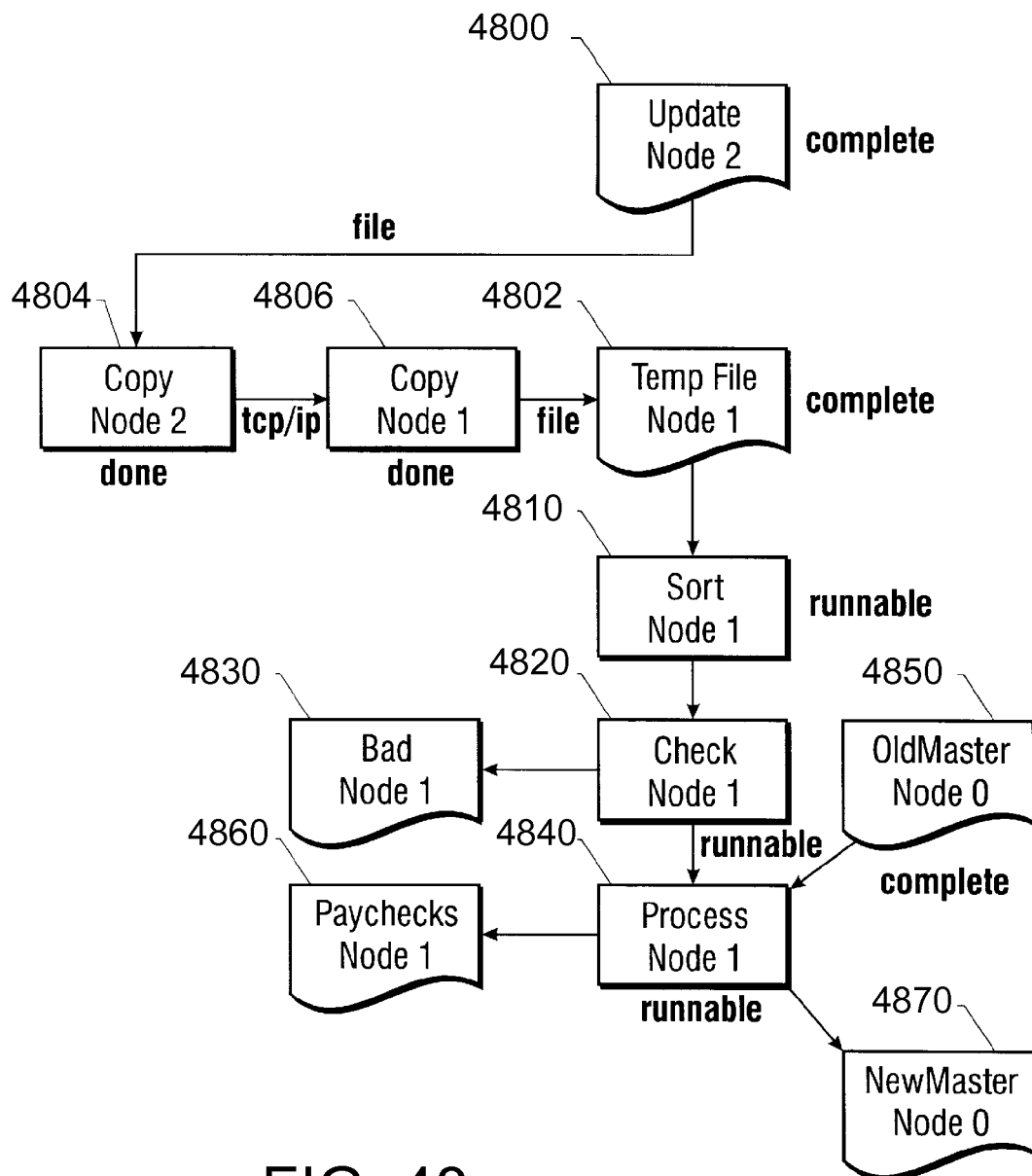


FIG. 48

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