

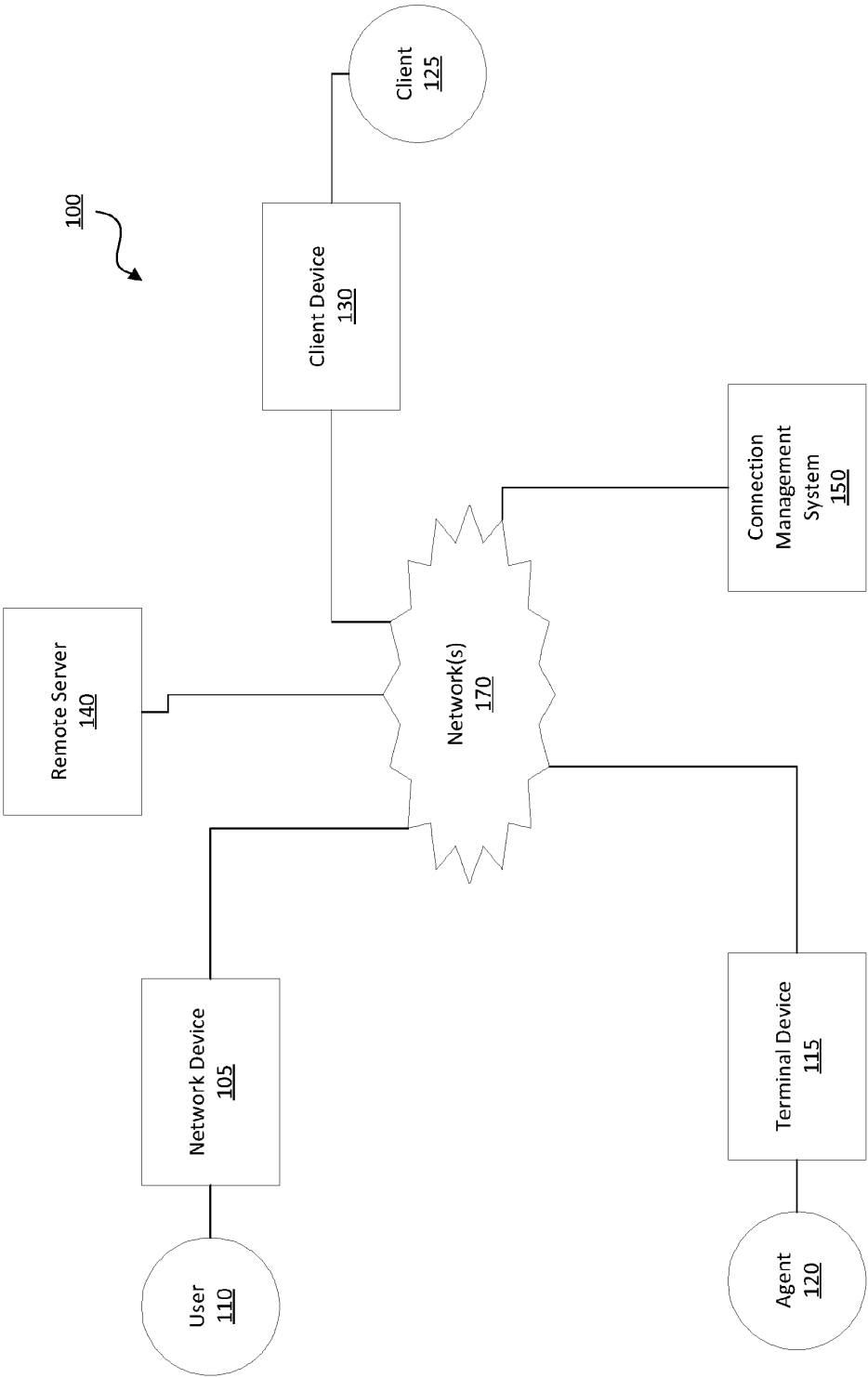


FIG. 1

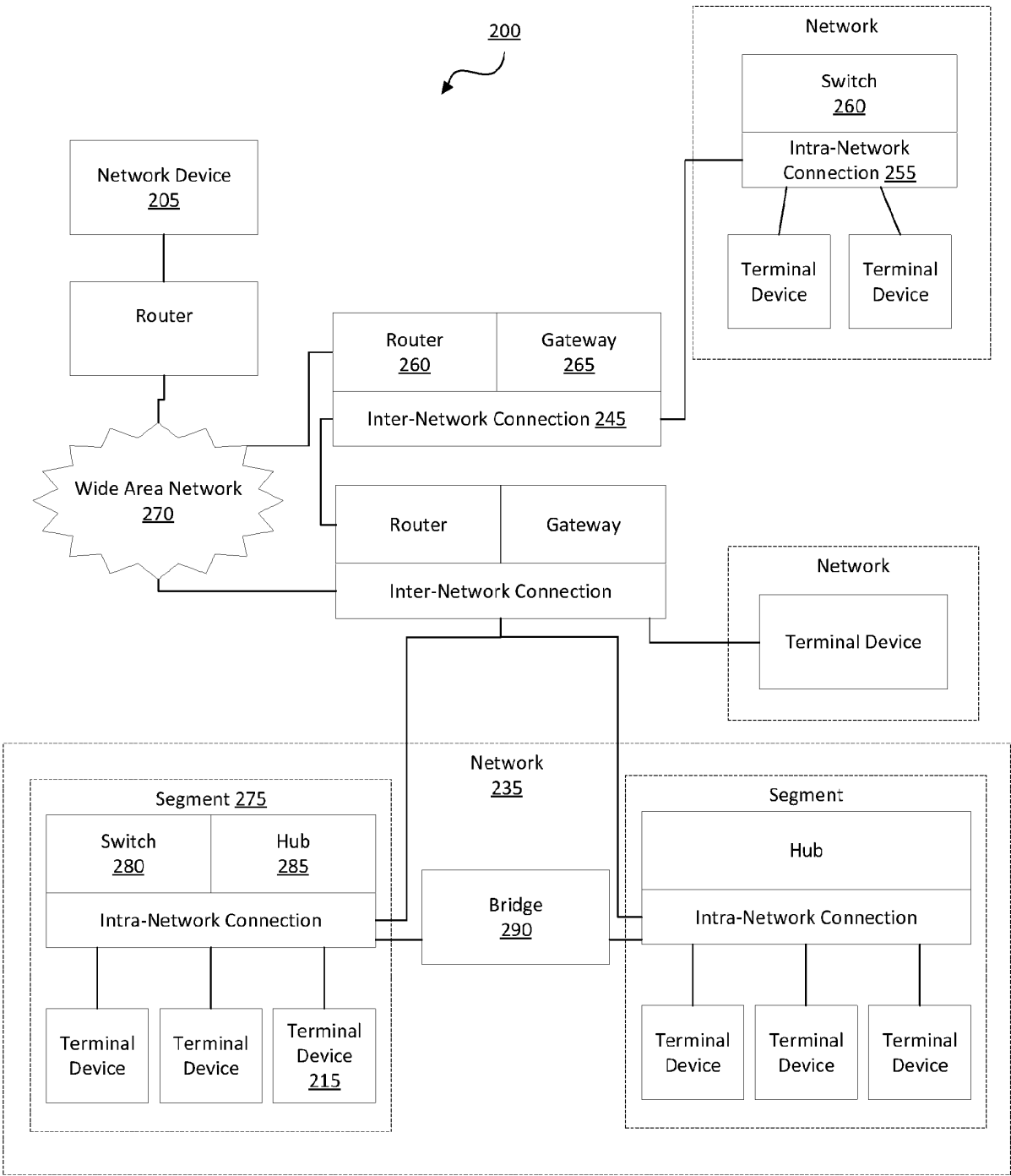


FIG. 2

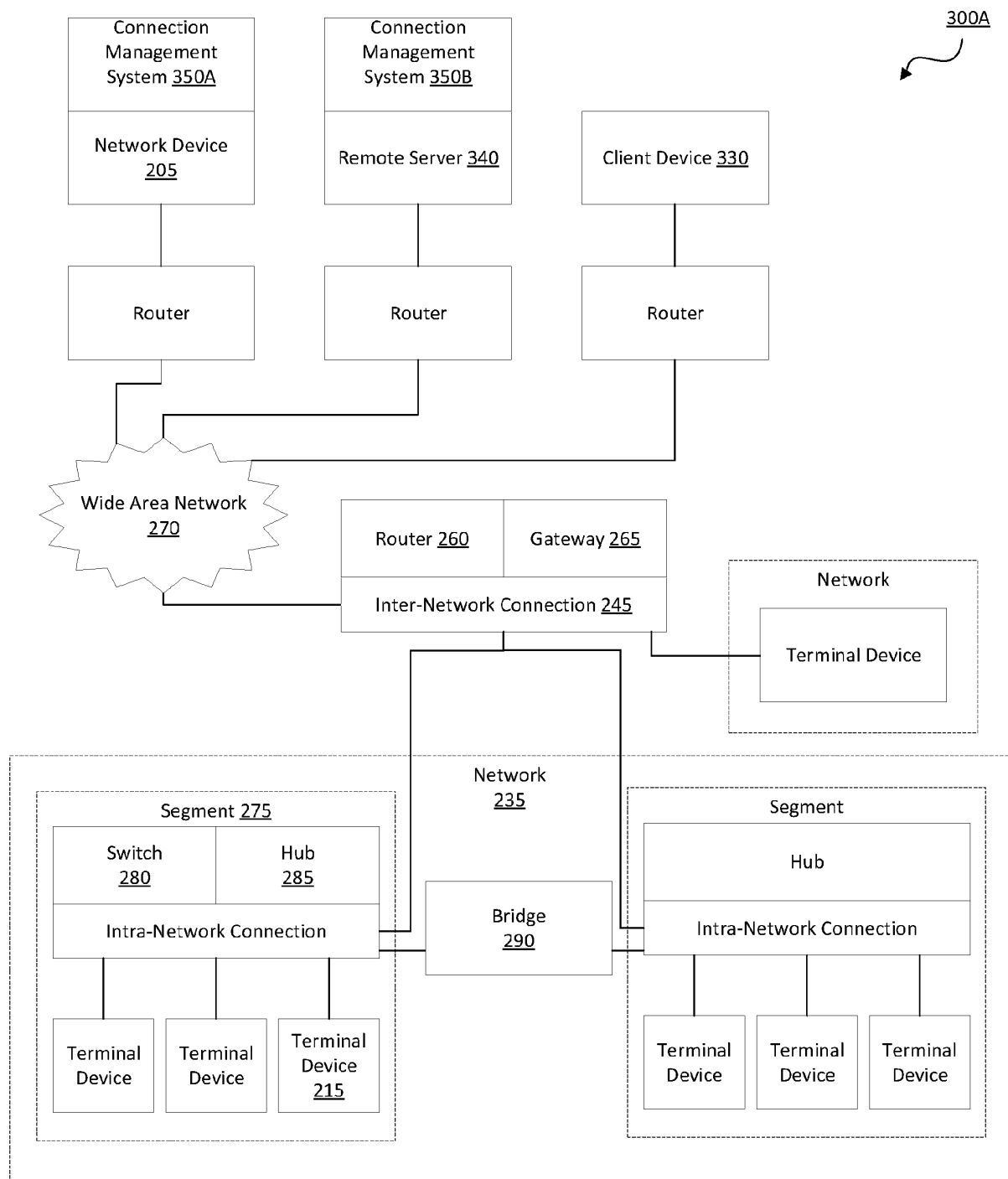


FIG. 3A

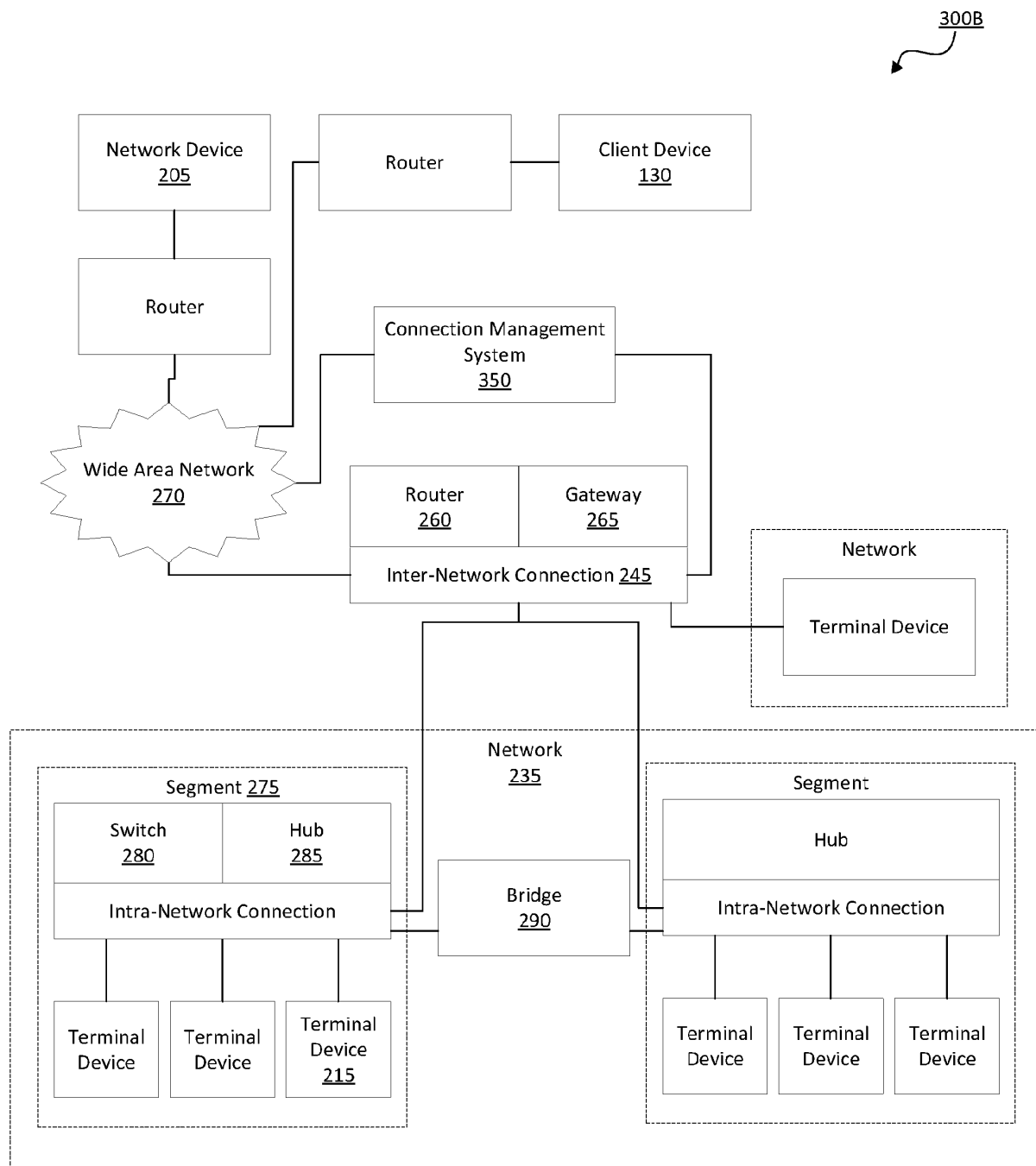


FIG. 3B

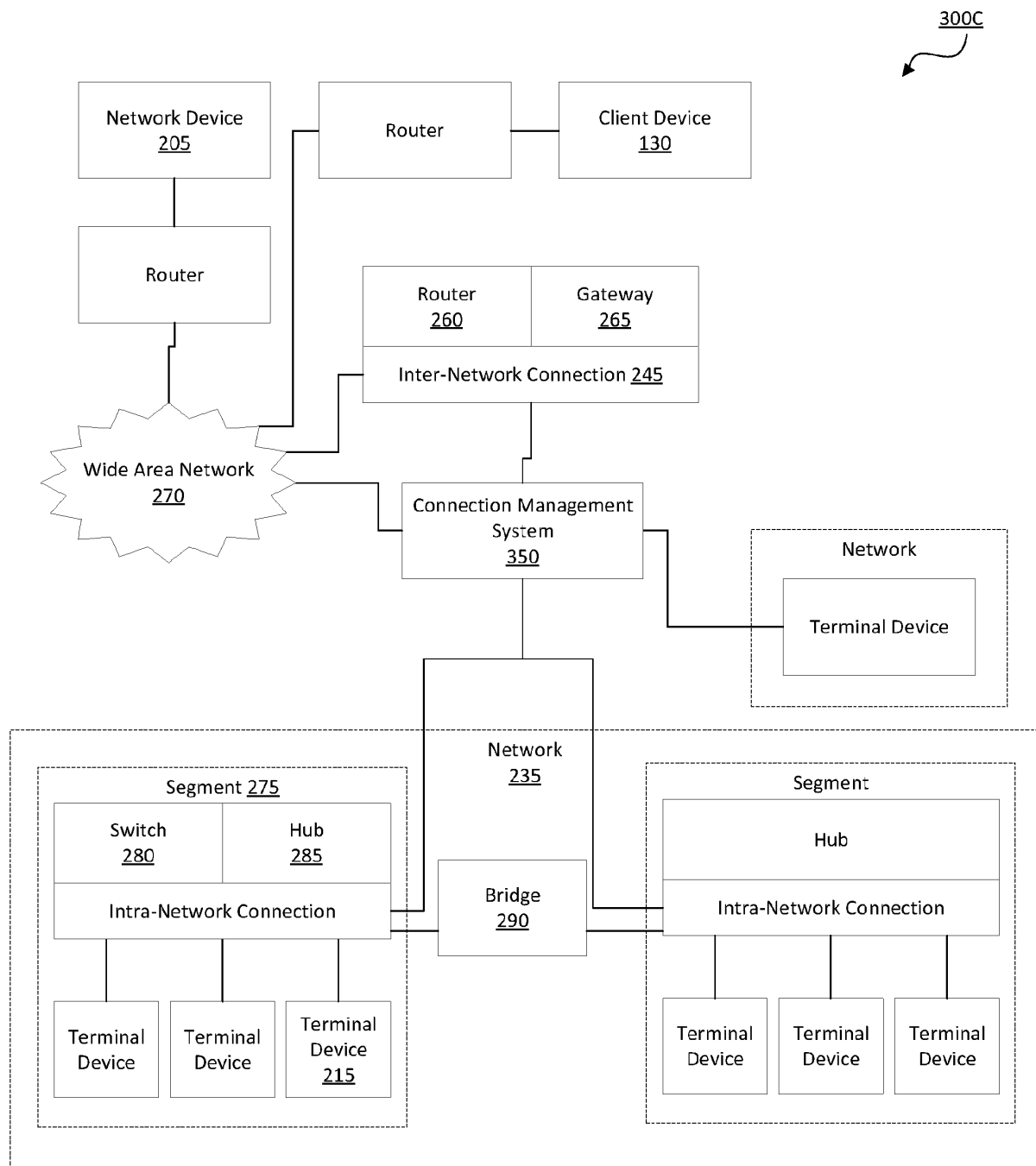
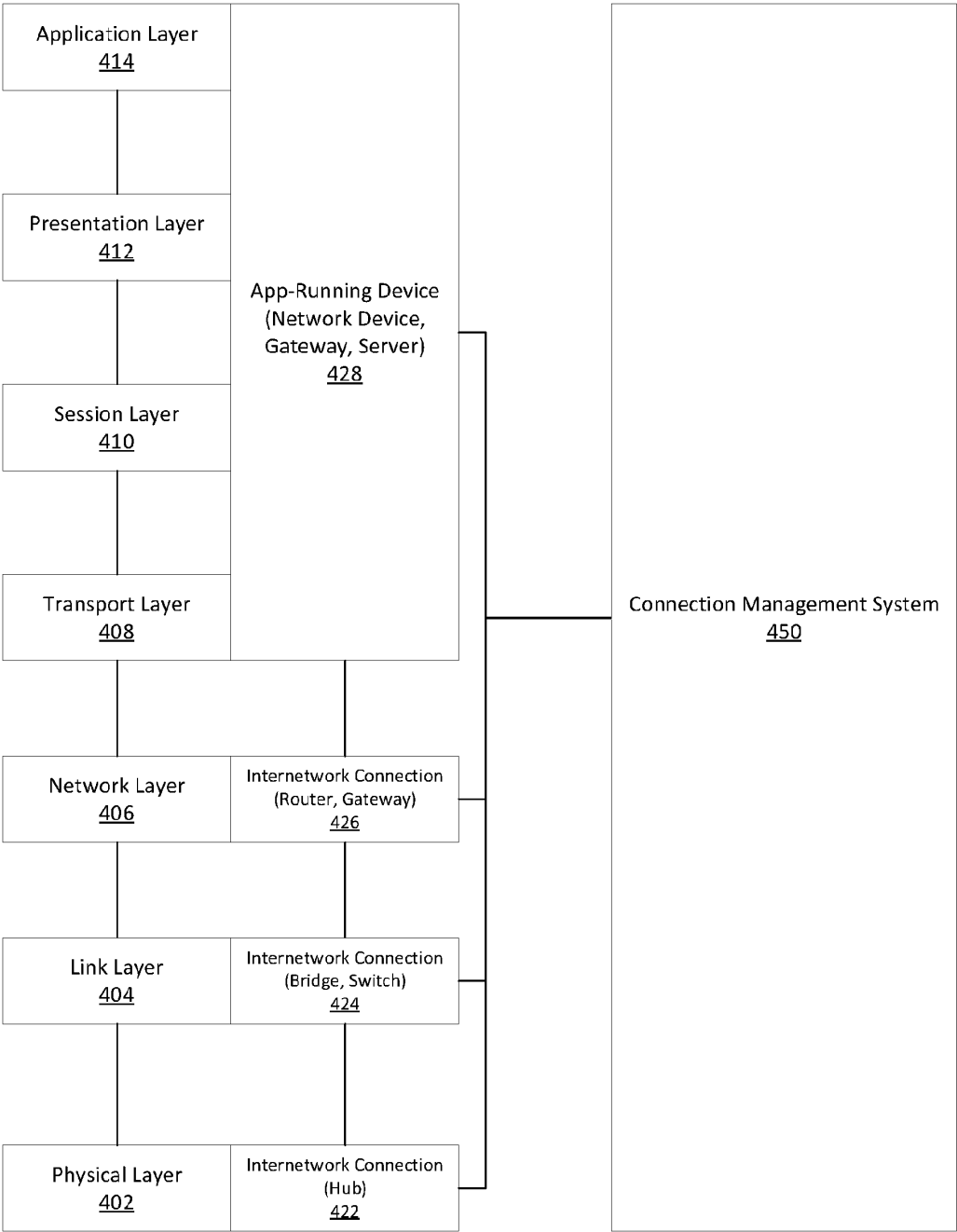


FIG. 3C



400

FIG. 4

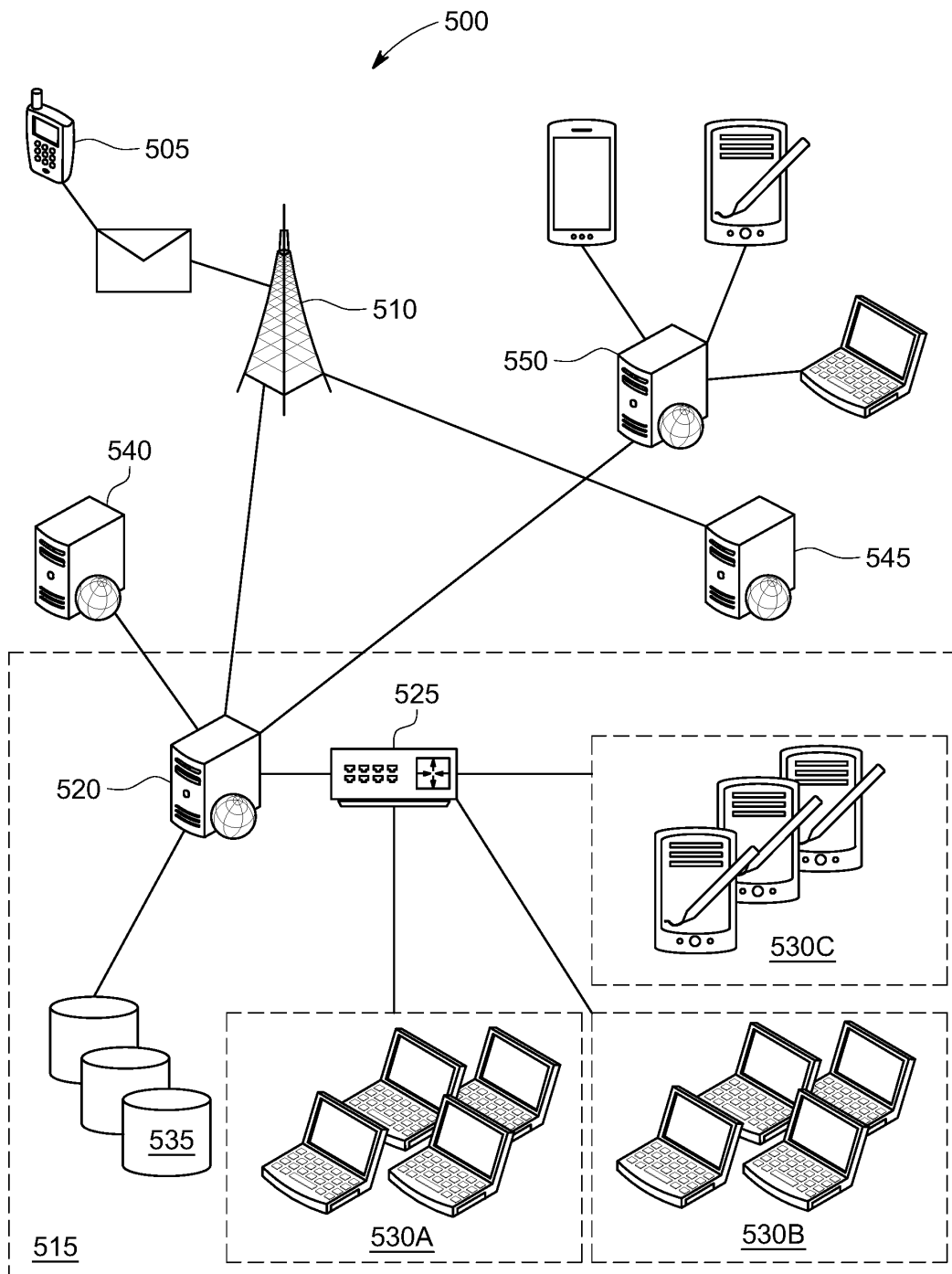


FIG. 5

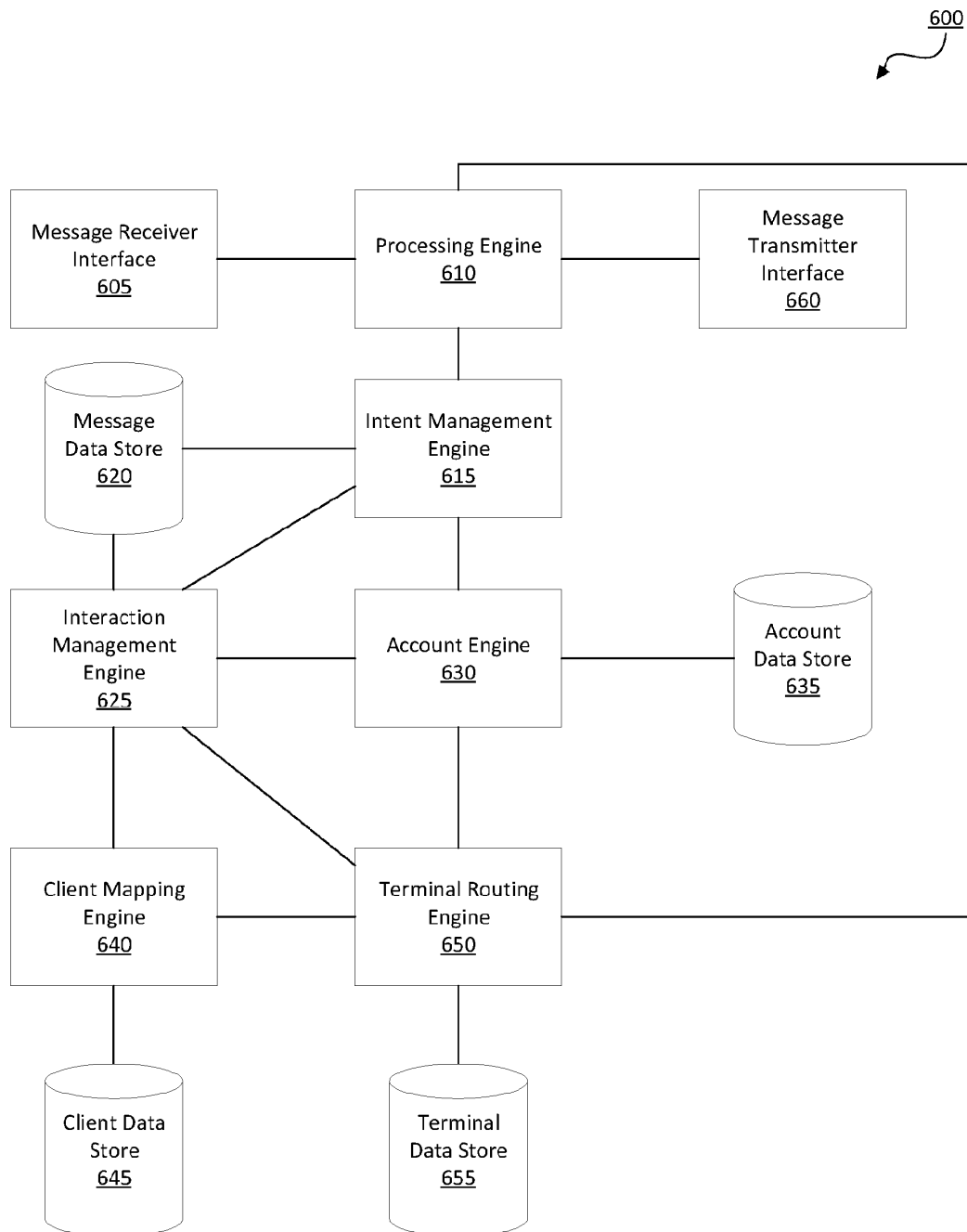


FIG. 6

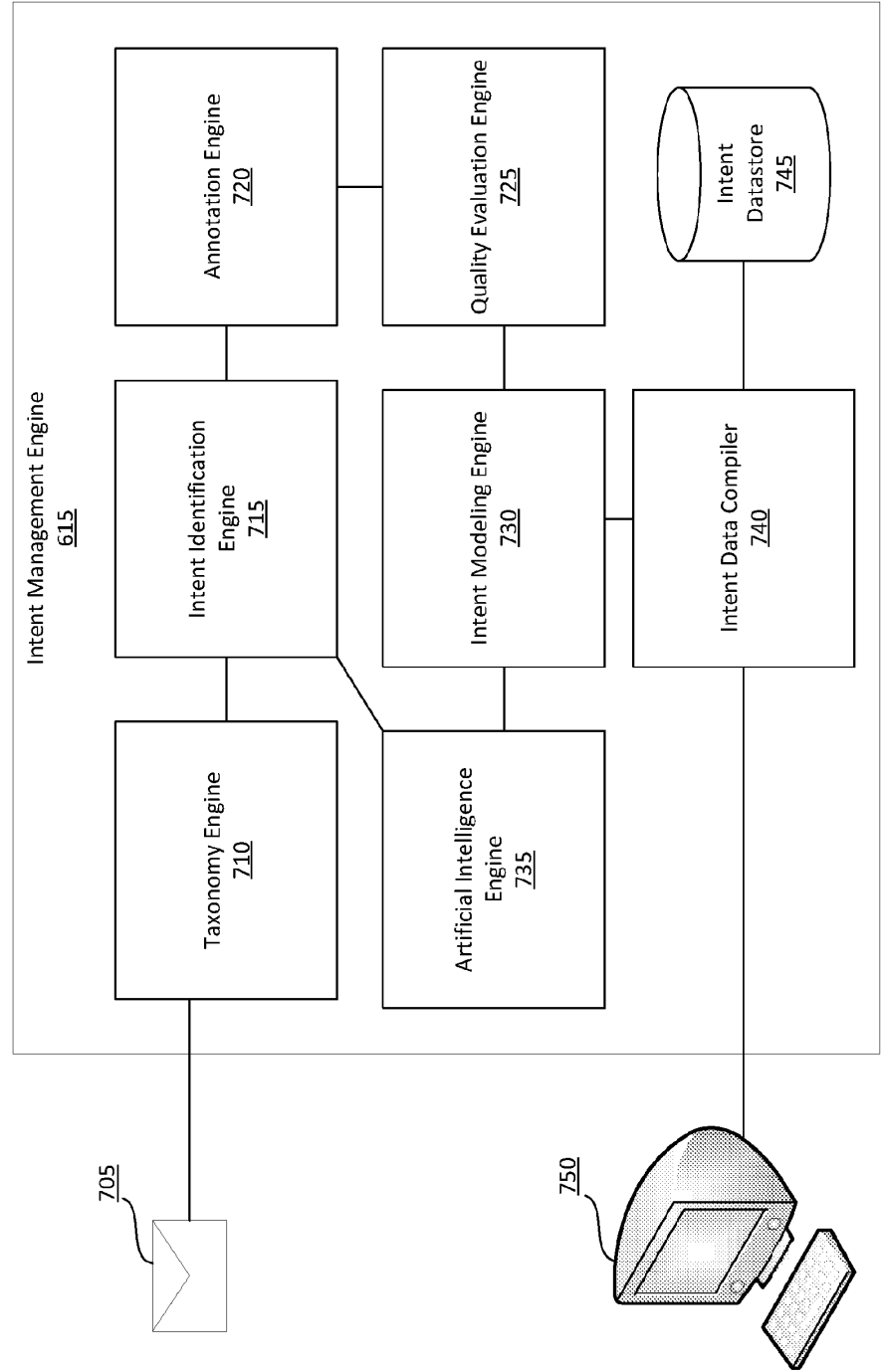


FIG. 7

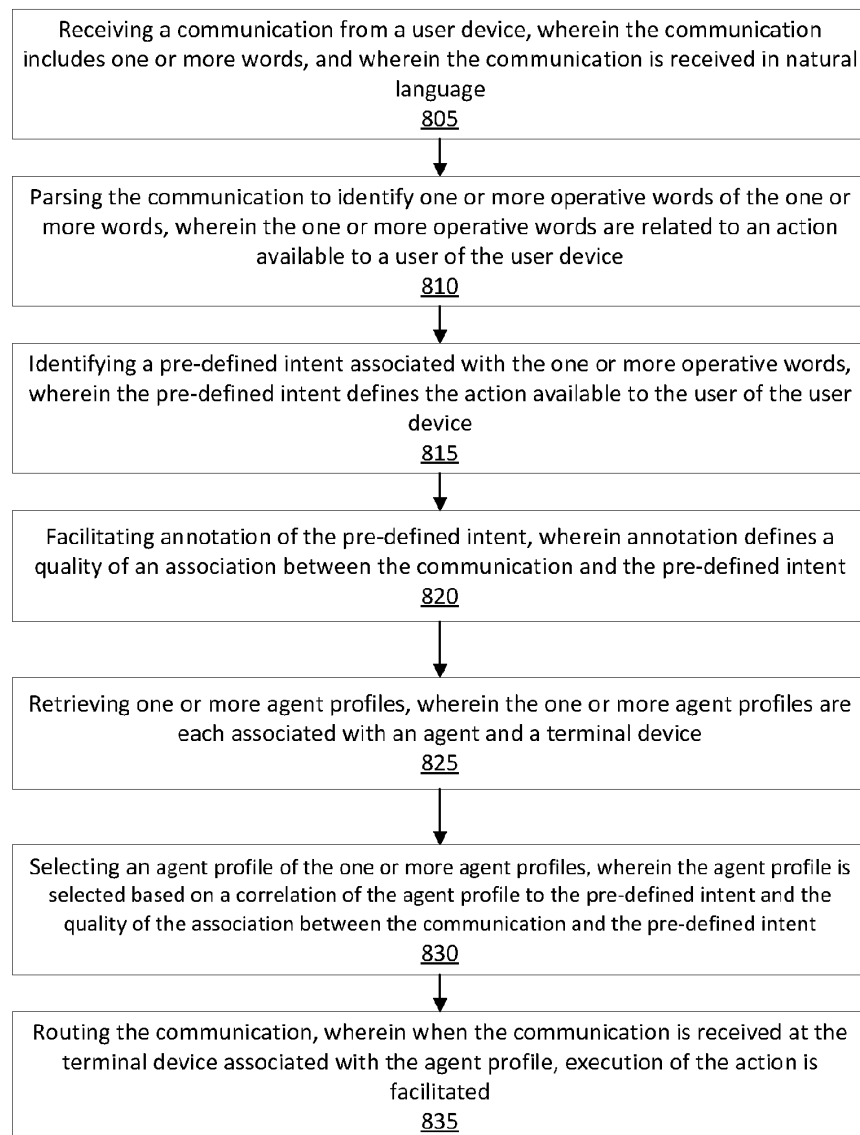


FIG. 8

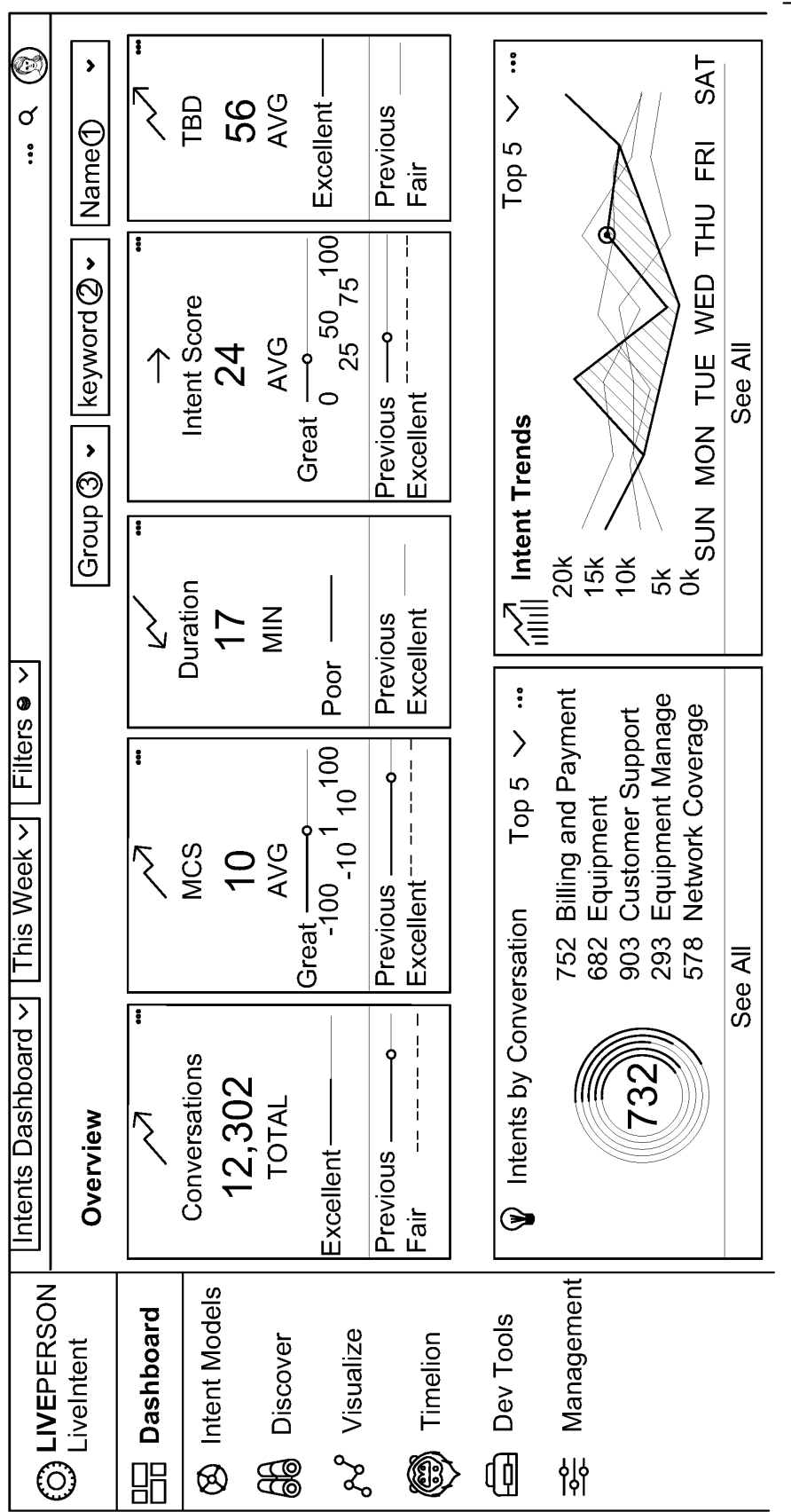


FIG. 9A/1

(A)

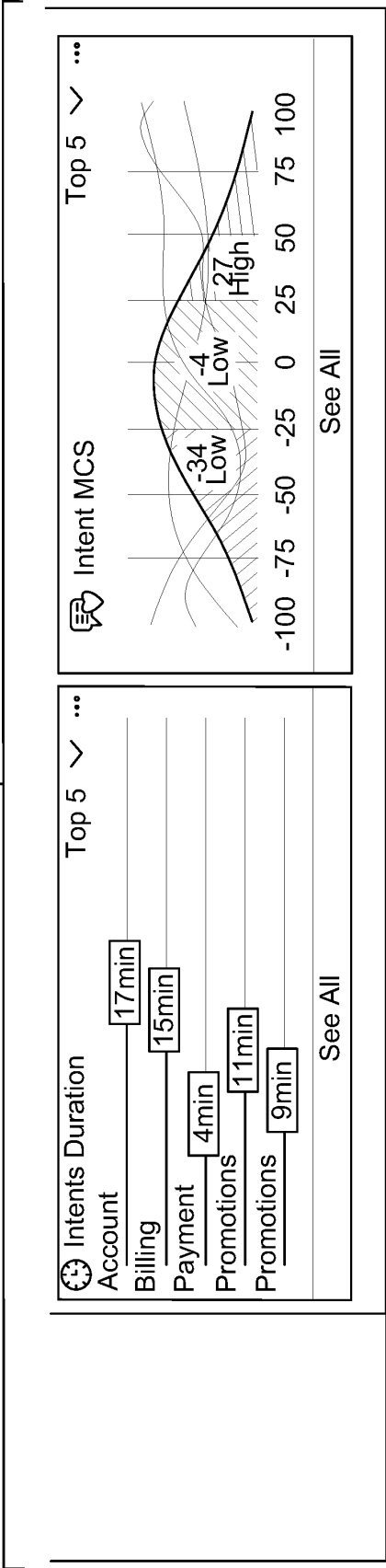


FIG. 9A/2

Conversations

Conversations

3,894

TOTAL

Excellent

Previous

Fair

Lauren Jones

Duration

14

MIN

Poor

Previous

Excellent

Closed Conversations

65%

AVG

Great

Previous

Excellent

KPI Range: 60-50

NPS Score

24

AVG

Great

Previous

Excellent

Duration: 3-80 minutes

Messages Per Conversation

6

AVG

Excellent

Previous

Fair

Agent's Conversations

All

Emma Rose

11:05AM

Melisa Jones

10:55AM

Automated

10:01AM

Emma Rose

01:20AM

Alex Sexton

11:05AM

Melisa Jones

10:55AM

Automated

10:01AM

Overall Rating

Good

Resolution

Resolved

Notes

Recommendations

Review

Make clear that chatting with a bot

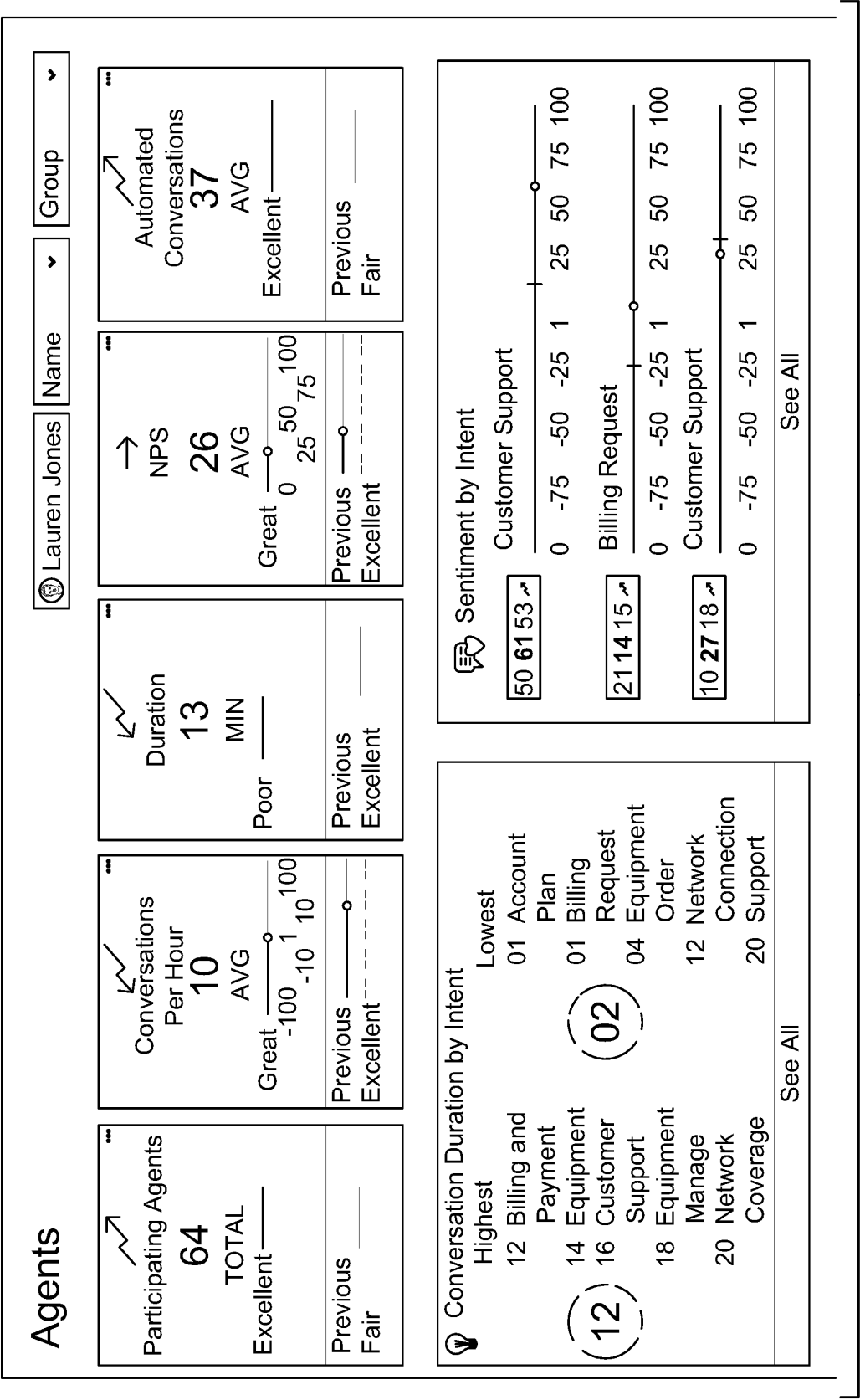
Personalized visitor experience

Shared capability of the bot

Disagree

Agree

FIG. 9B



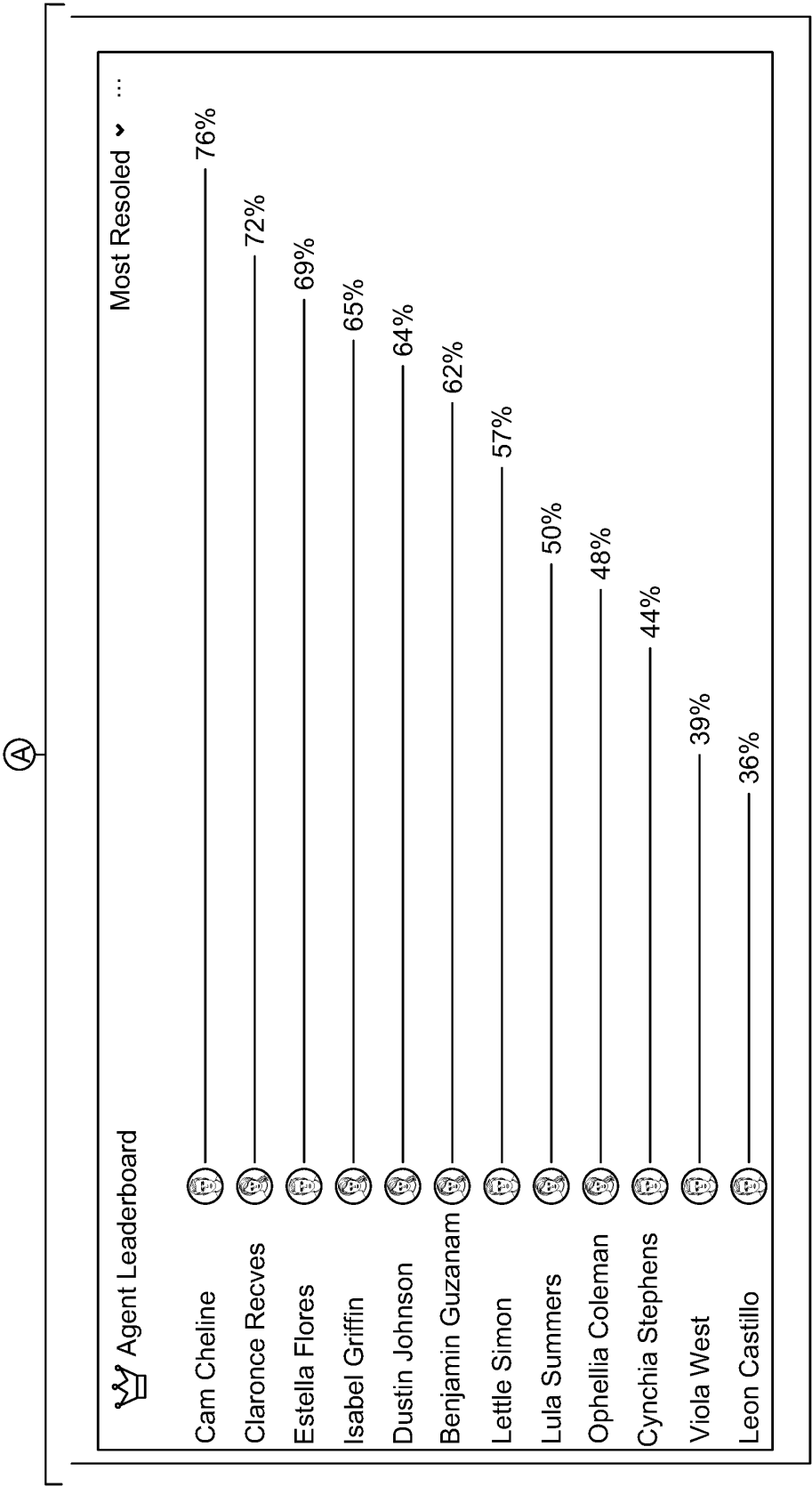


FIG. 9C/2

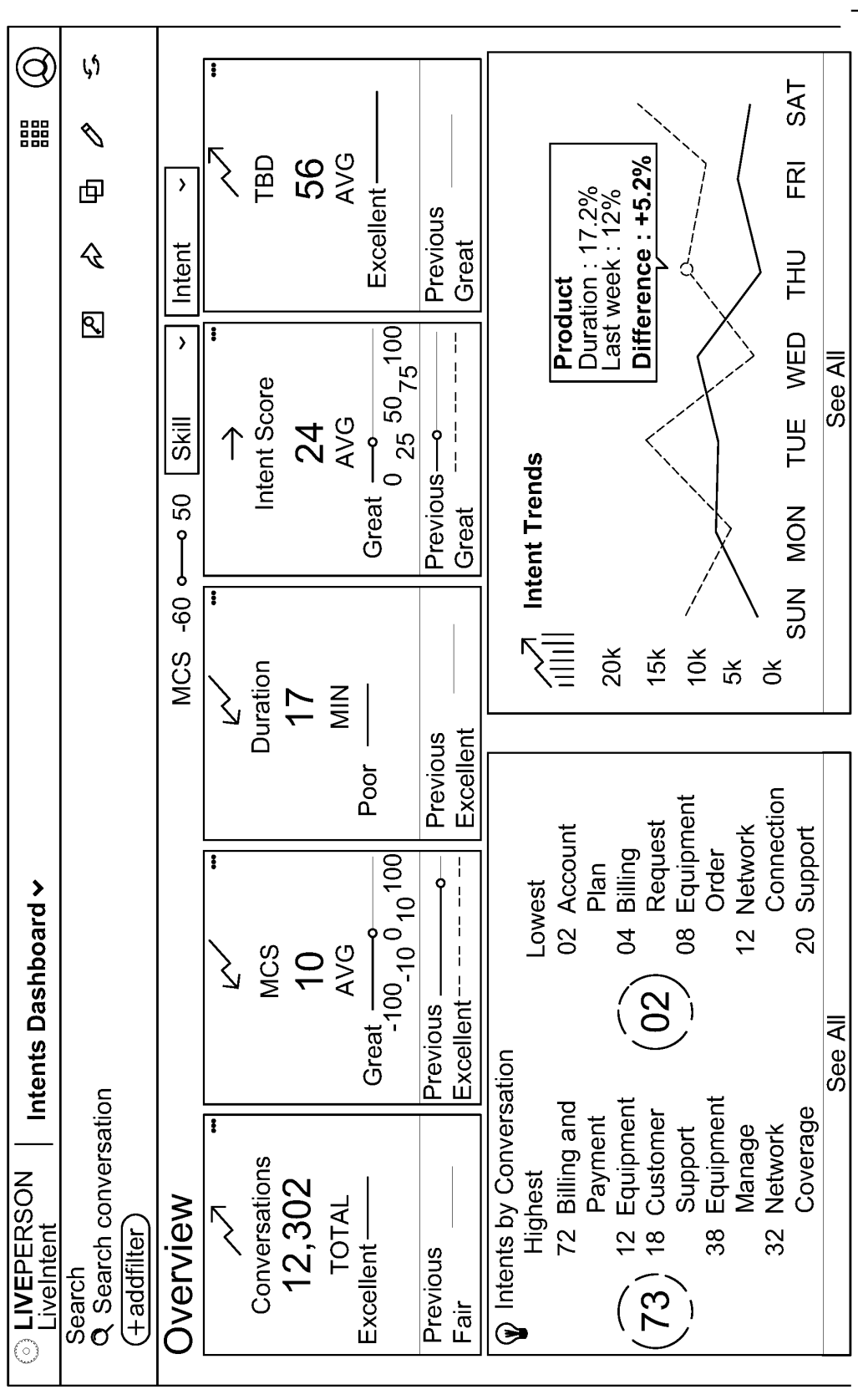


FIG. 9D/1

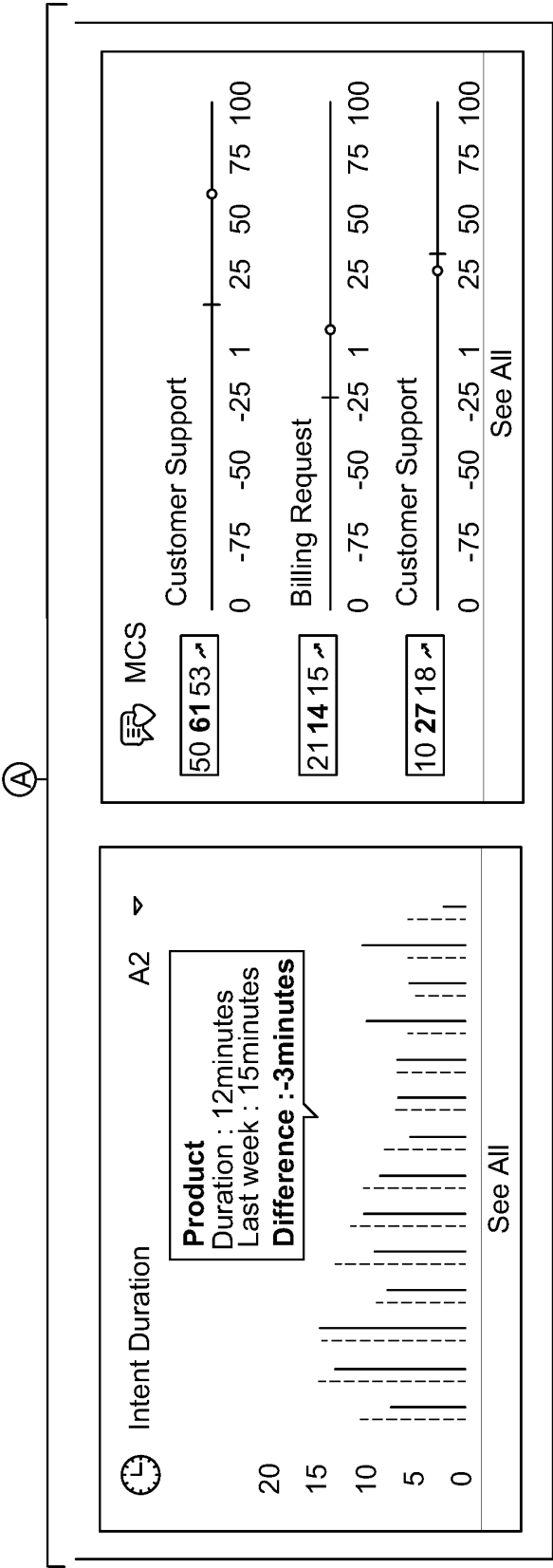


FIG. 9D/2

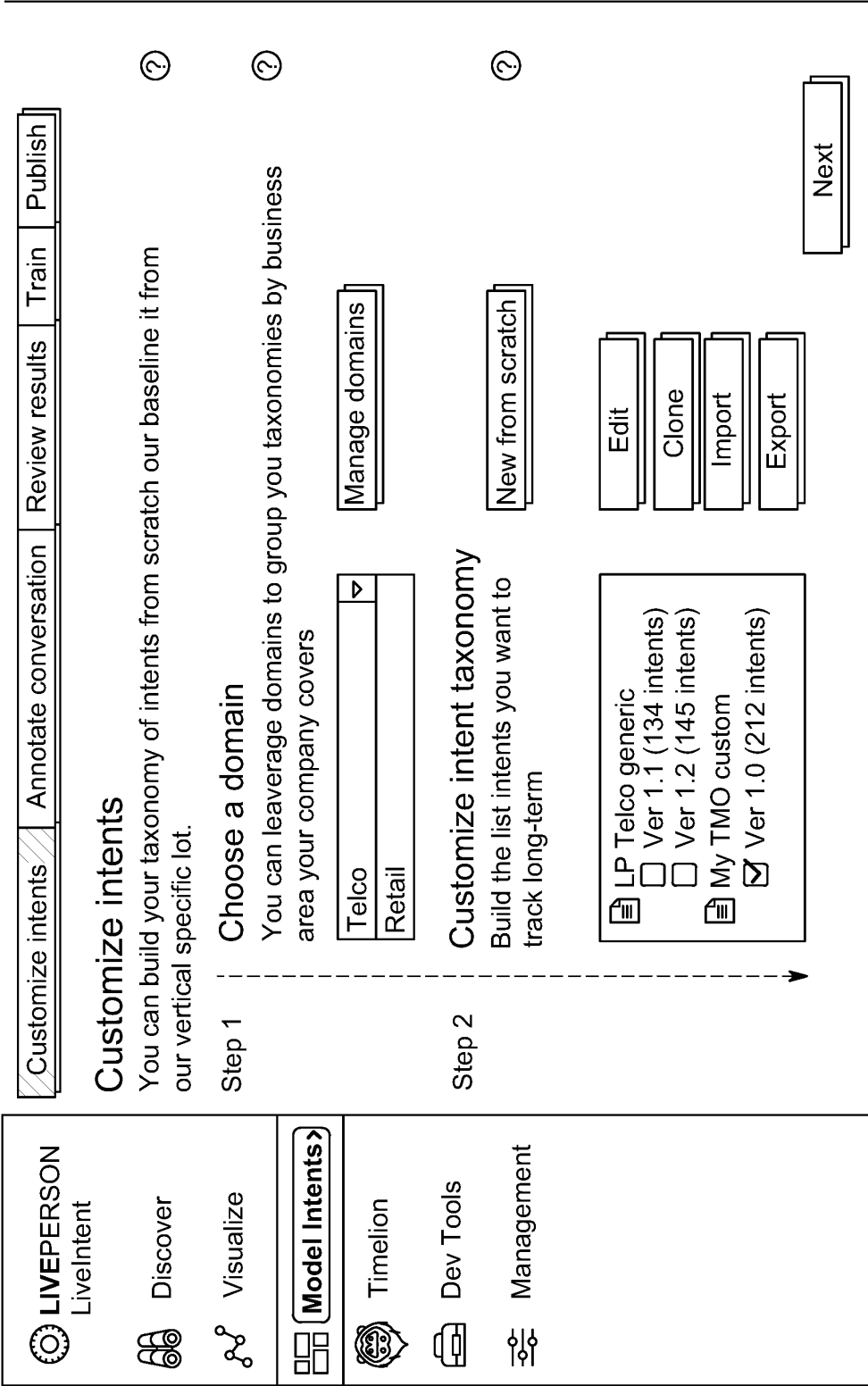
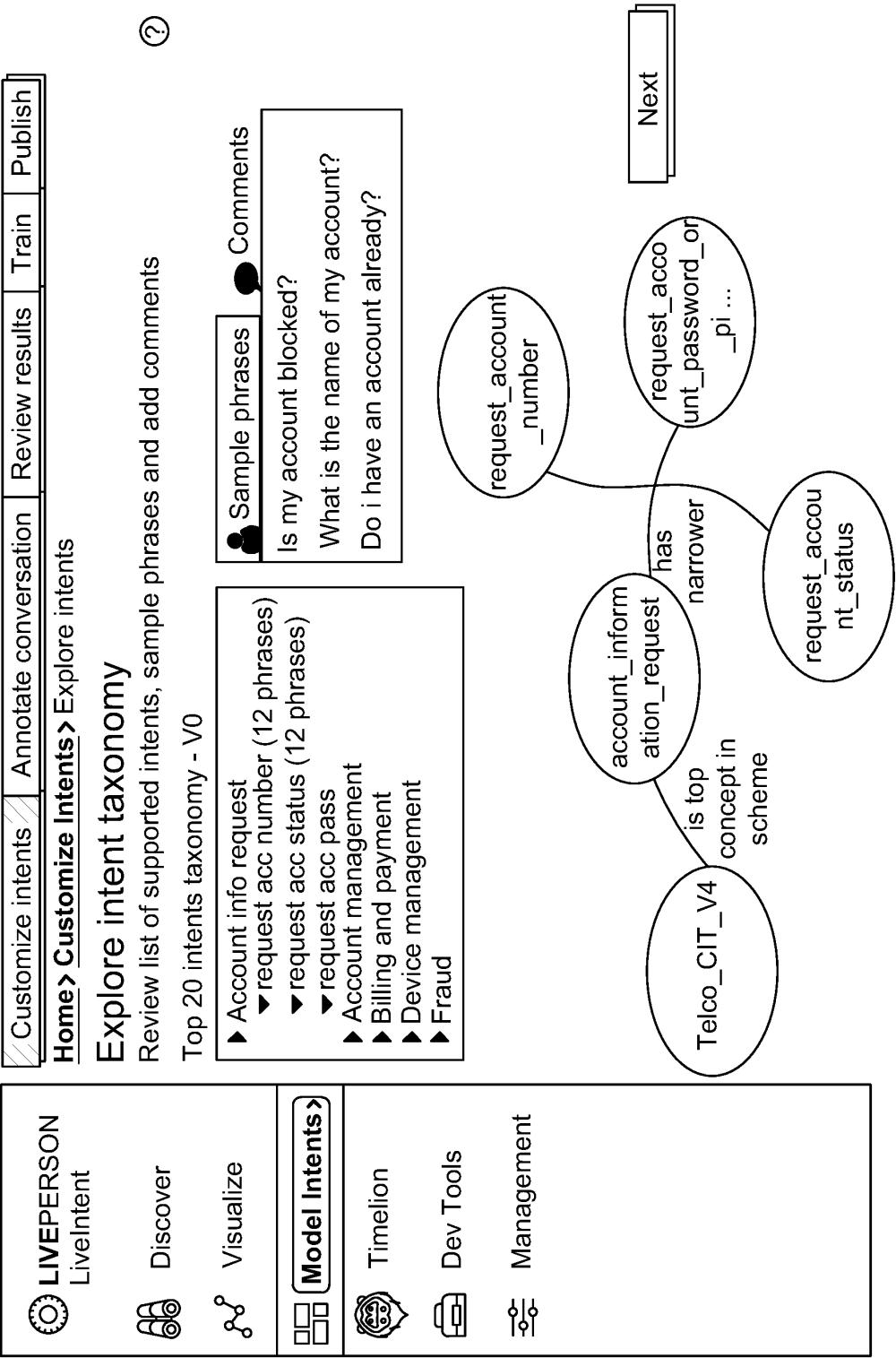
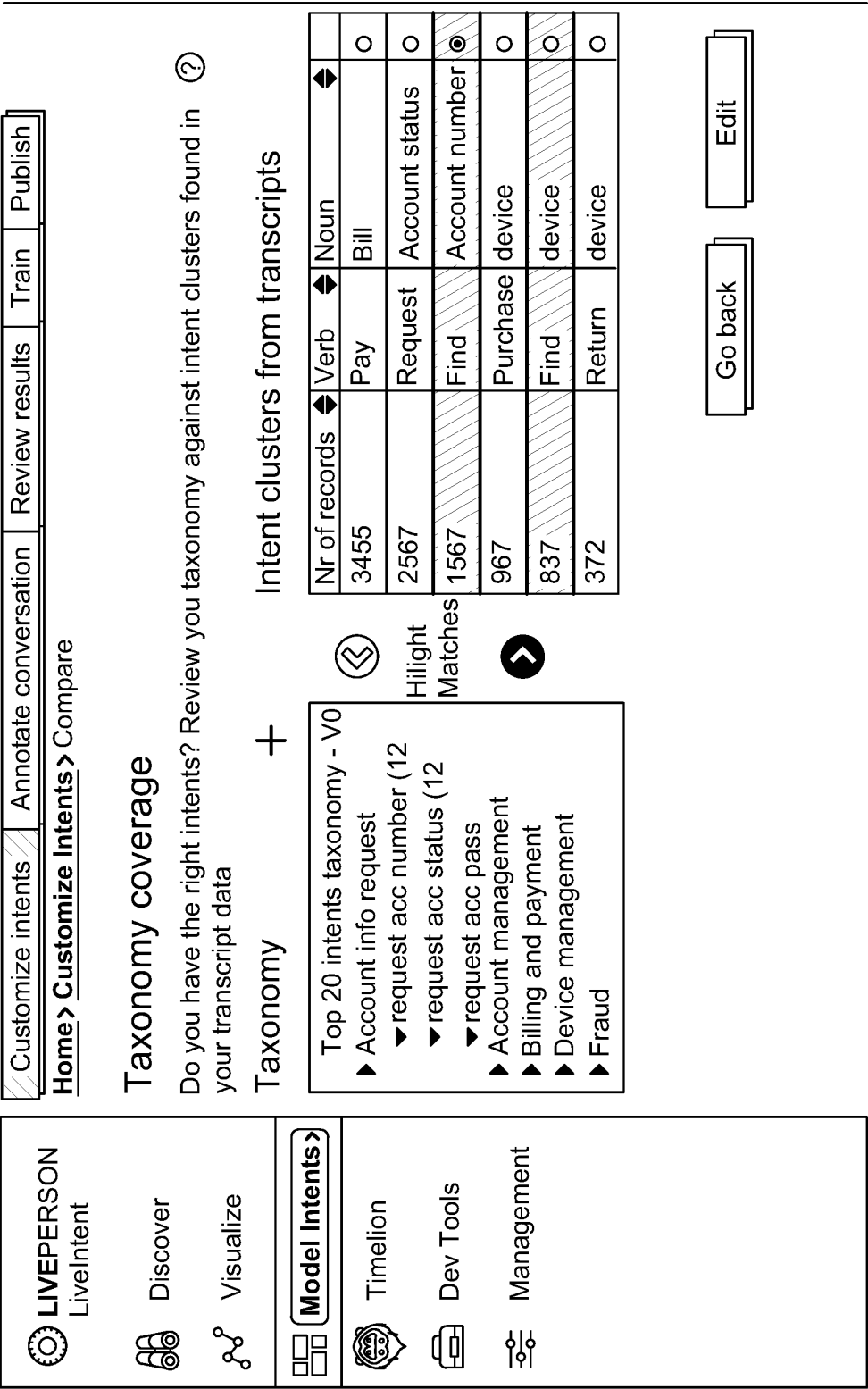


FIG. 10A





Discover

Visualize

Model Intents

Timelion

Dev Tools

Management

Customize intents

Annotate conversation

Review results

Train

Publish

Home

Customize Intents

Intent Editor

Edit intent

You can add/ remove intents and related sample phrases

Cluster

Find, account number, 2344 phrases

Matched intent

Request account number I 2 phrases

Phrase explorer

Phrases from transcripts

☐ I can't find my account number?

☒ What is the name of my account?

☐ Are you sure I've opened my account?

☐ Is my account number different than my account name?

☒ Where do i find my account?

☐ What are the steps to get an account number?

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

ID

Name

Parent

Account information request

Account information request

Account info

ID

Name

Parent

FIG. 10D

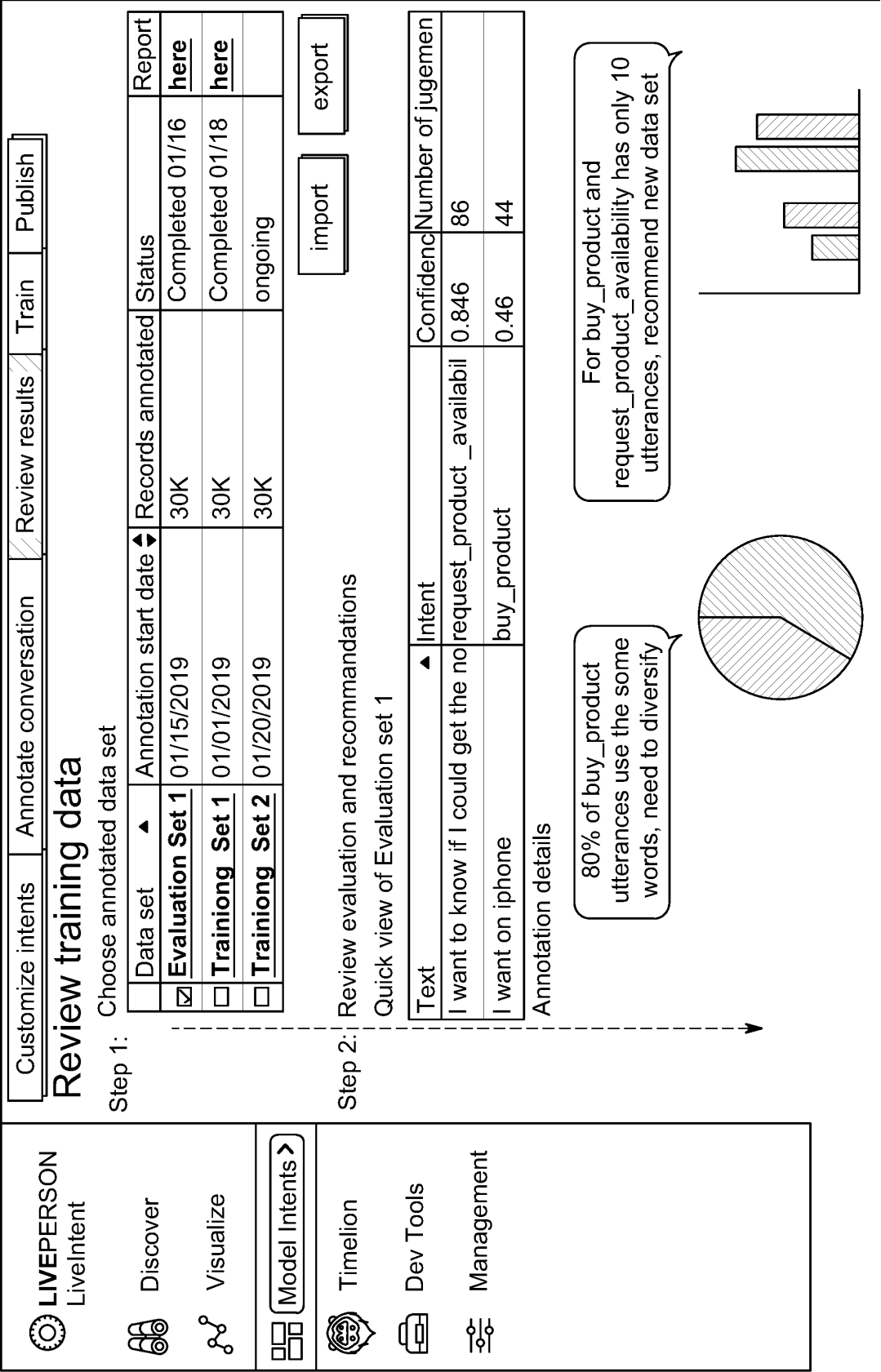


FIG. 10E

Discover

Visualize

Model Intents >

Timelion

Dev Tools

Management

Customize intents

Annotate conversation

Review results

Train

Publish

Watson Training

Step 1: Model configuration

Name

Confidence threshold (%)

Step 2:

Configure data sets

Choose training data set

Name	Start date	End date	Number of records
☒ Evaluation Set 1	01/12/2019	03/12/2019	30K
☐ Trainiong Set 2	01/12/2018	03/12/2018	30K

Choose evaluation data set

Generate model

Name	Start date	End date	Number of records
☐ Evaluation Set 1	01/12/2019	03/12/2019	30K
☒ Trainiong Set 2	01/12/2018	03/12/2018	30K

Step 3: Evaluation results

Model	Date gene	Taxonomy user	Status	Evaluation	Insights
☐ LargeExperim.	01/12/2019	Tax v1.0-DataSet v	Complete	Good Result	High confusion see ch
☒ FirstMode	01/14/2019	Tax v1.0-DataSet v	Complete	Fair Result	Poor distribution see c
☐ FinalModel	01/15/2019	Tax v1.0-DataSet v	Ongoing	Coming so	NA

Evaluation details - First Model

4 intent pairs with 50% overlap, recommend updating taxonomy

Next

FIG. 10F

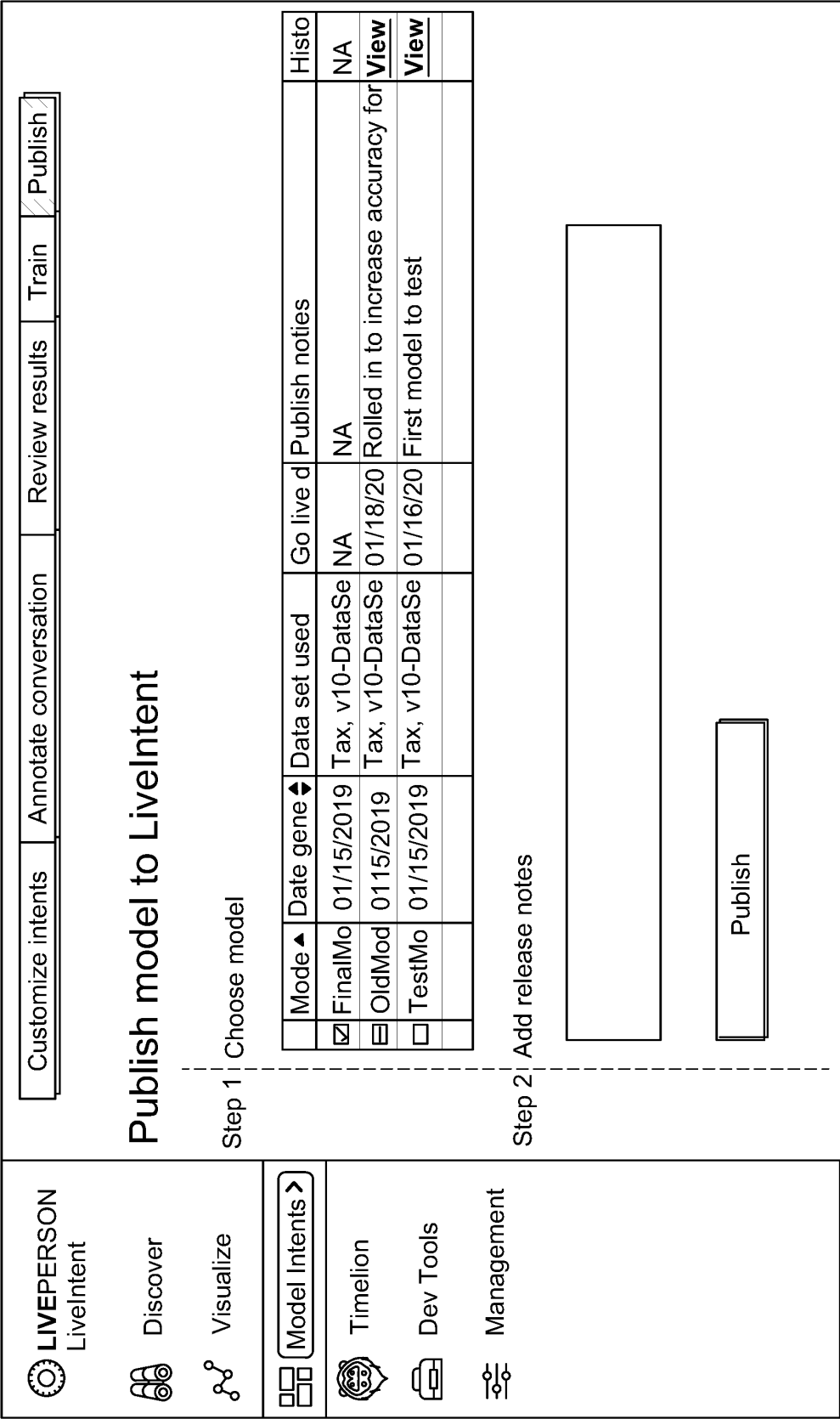


FIG. 10G

WordDocs

MyDocsCollaborateActivitySearchAdvancedTasksCreateFavouritesSupport

MyDocsIntent

★

Name

★

Step1-Taxonomies

★

Step2-Annotation

★

Step3-TrainingDataEval

★

Step4-Models

^

Last modified

Size

Type

Today 9:53 AM

0B

Folder

Today 9:53 AM

0B

Folder

Today 9:53 AM

0B

Folder

Today 9:53 AM

0B

Folder

Actions

Share

Edit

Upload

FIG. 11A

B	C 	D	
count 	vb 	nm 	
1530	upload	proof	
1454	fix	my interest rate	
1106	will	a payment	
982	disbursed	my loan	
783	refinanced	my loans	
649	change	the amount	
606	afford	a job	
544	make	a credit card	
531	make	a payment	
519	has	my daughter	
476	pay	my loan	
442	get	my loans	
435	need	a loan	
433	consolidate	my loans	
419	has	my son	
393	put	forbearance	
382	wil	a loan	
363	sign	my cosigner	
368	taken	my account	
348	enrolled	auto debit	
347	paid	my loan	

A

FIG. 11B/1

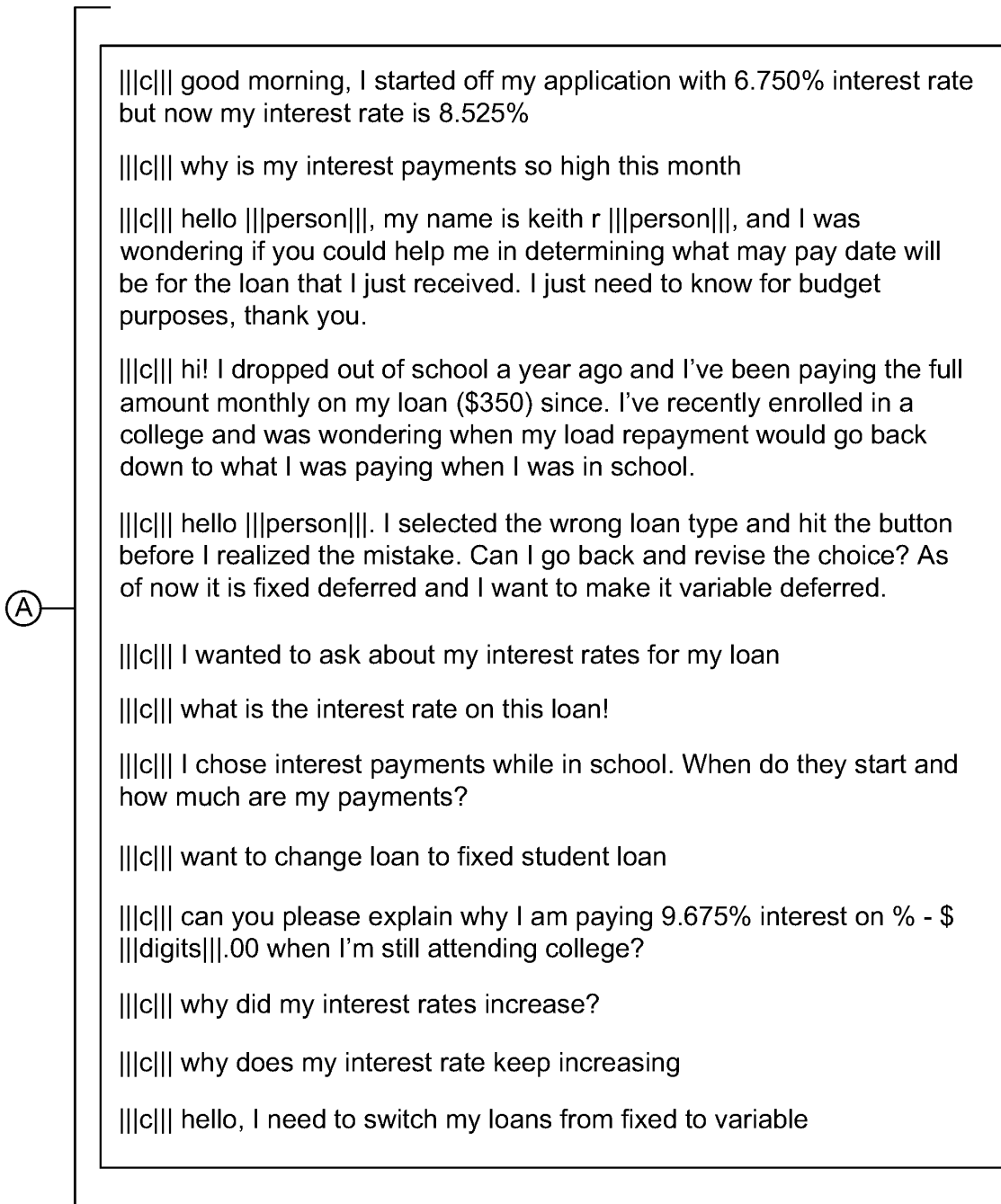


FIG. 11B/2

Telco_TMO_CIT_V2_08302018						
Topic	Subtopic	Intent	Unique Topics	Unique Subtopics	U	
Account Manage			8	19		
Billing and Paym	Account Fraud	Set-up Account				
Device	Account Informa	Unlock Account				
Network	Credits and Adju	Cancel An Account				
Plan and Service	Support	Suspend An Account				
Webapps Suppo	Means of Payme	Fix Account Login Issue				
Other	Payment Arrang	Transfer Account Ownership				
Non Intent	Device Purchase	Authorize Account User				
	Device Support	Authorize E-Signature				
	Shipping Device	Request Fraud Policy Information				
	Device Manager	Request Fraud Investigation On Account				
	Performance	Request Information On Existing Fraud Investigation				
	Service Support	Update Account Information				
	Insurance and P	Request Account Number				
CIT Uniques						

FIG. 12

	Bots & Automation	Intent Builder ▼	Region United States	Org Name LP Playground	?
	telco	Billing			
	Intents	Entities			

telco

Sort: Name A-Z ▼

Intent Details

Intent name

Billing

TRAINING PHRASES ?

How much per month ⊗

What is my monthly cost ⊗

What is the price ⊗

Training phrase +

Training Phrases are provided by you as examples of the intent.

Lamed Phrases are Letter- provided messages that the automation thinks convey this Intent.

2 Intents

FIG. 13

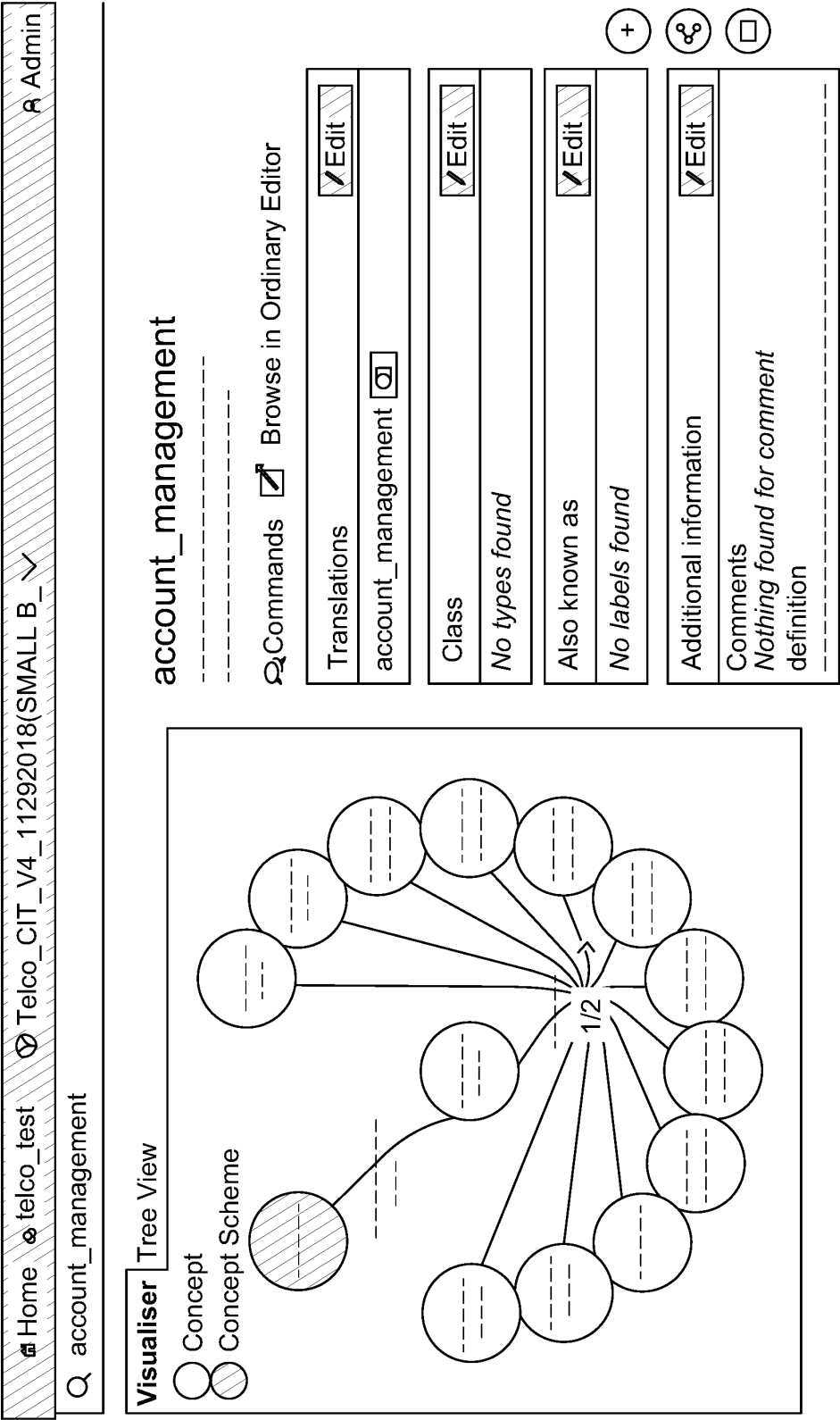


FIG. 14A

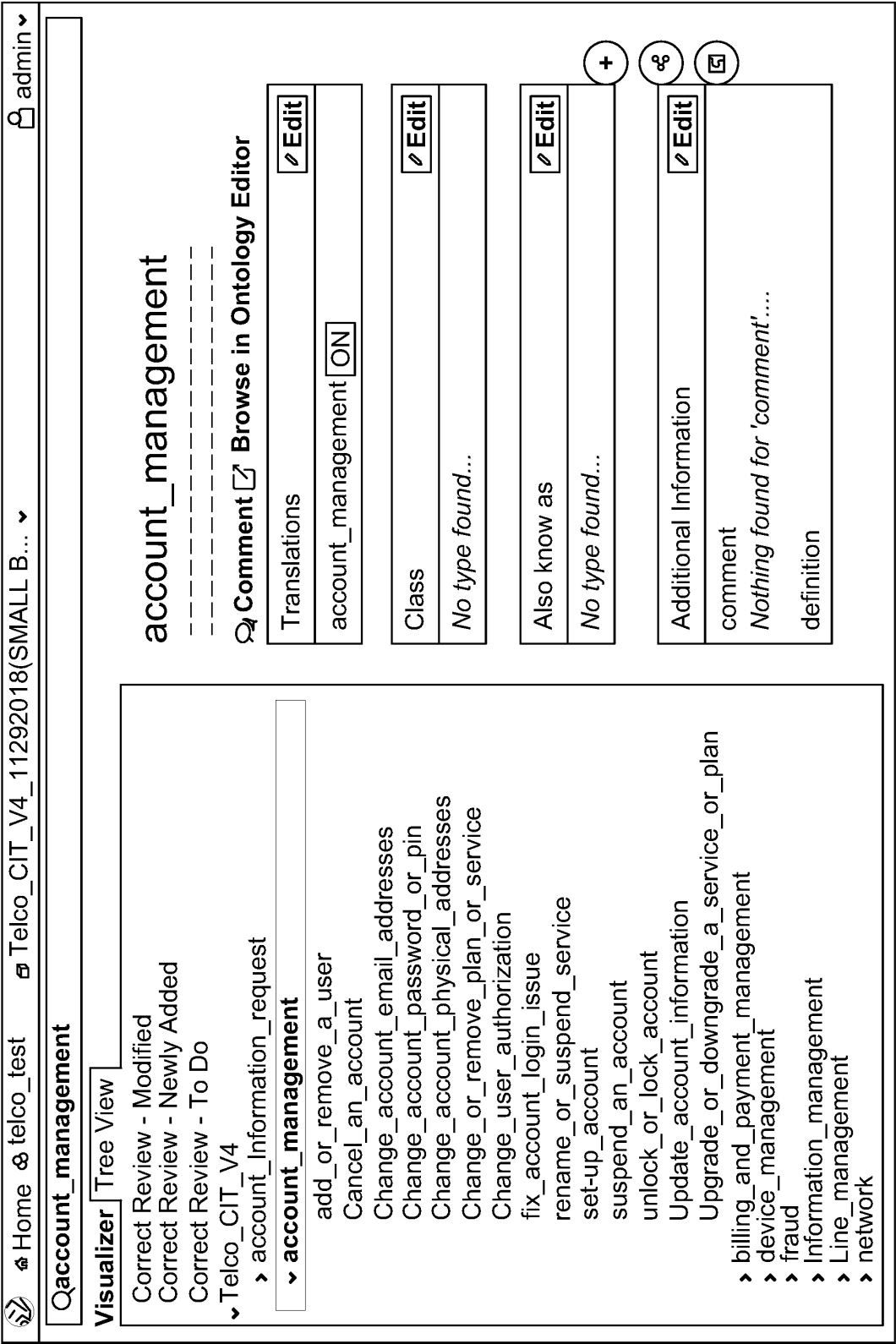


FIG. 14B

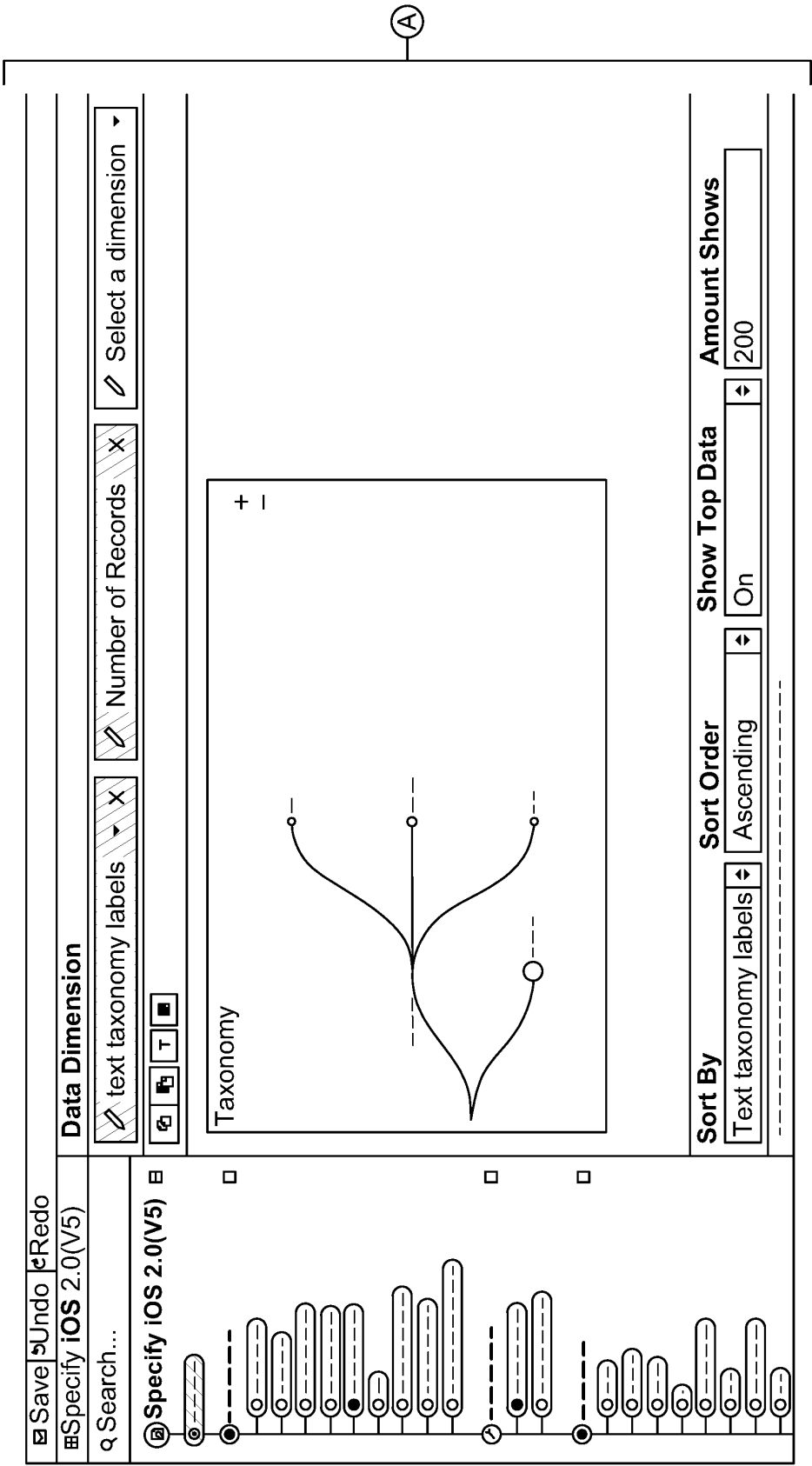


FIG. 15/1

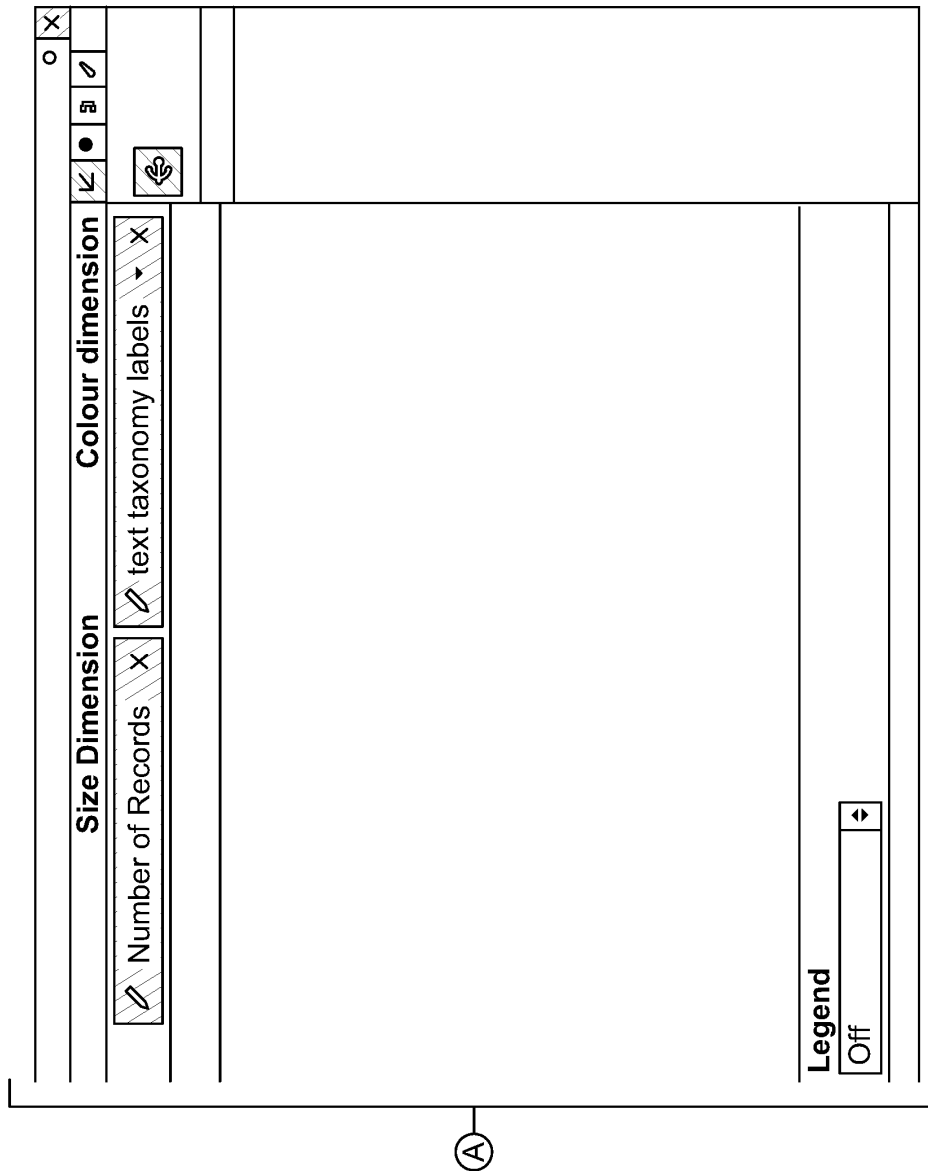


FIG. 15/2