

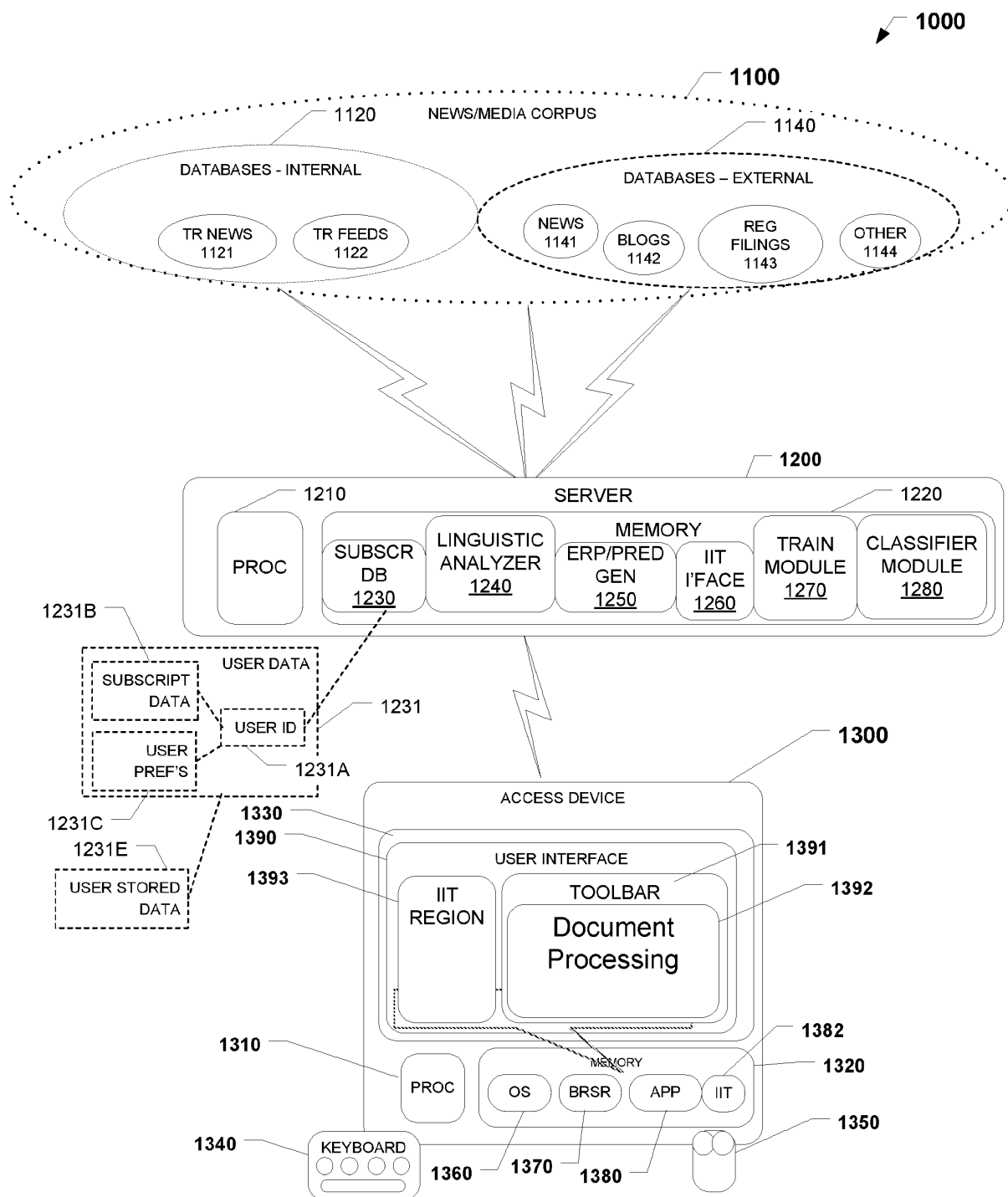


FIGURE 1

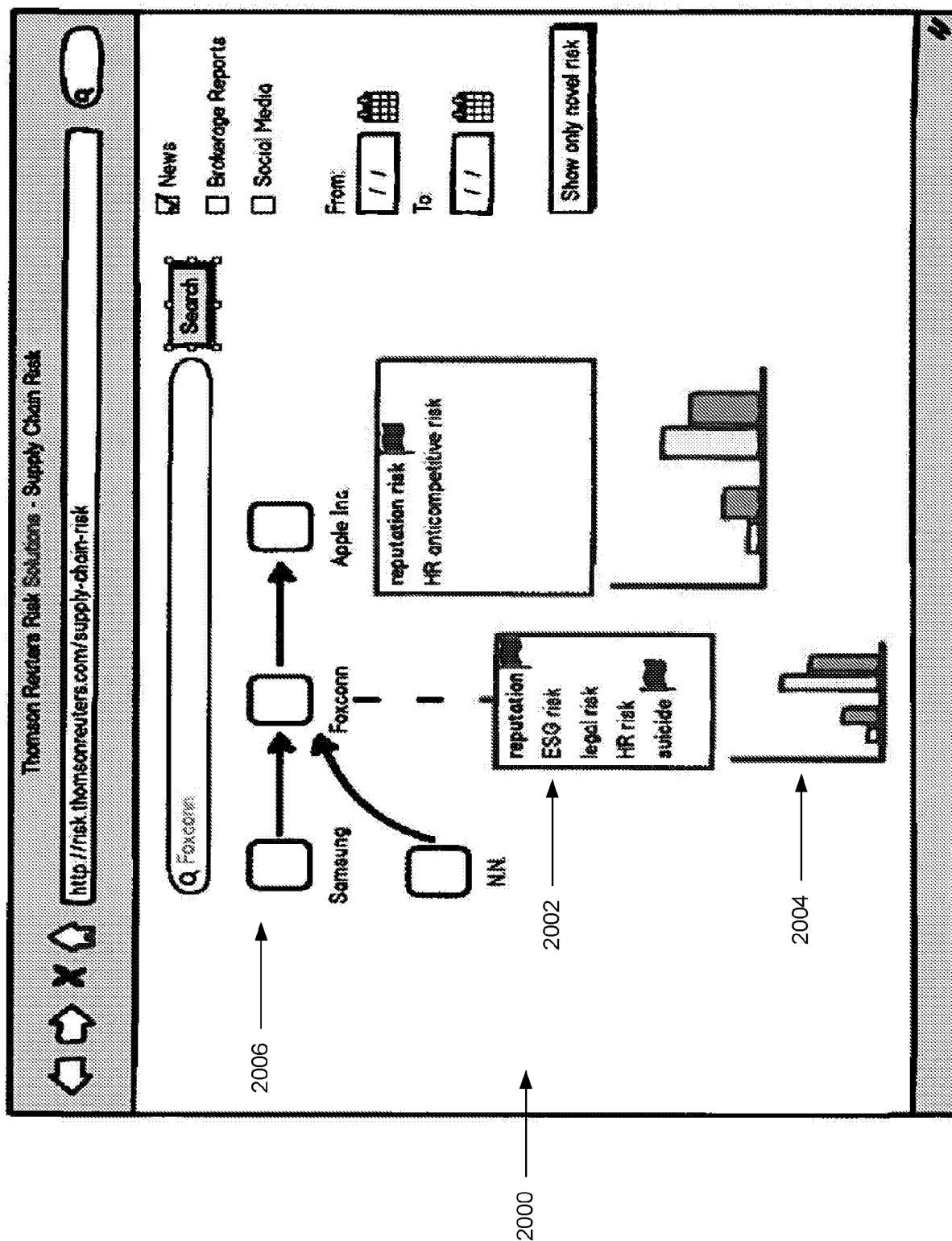
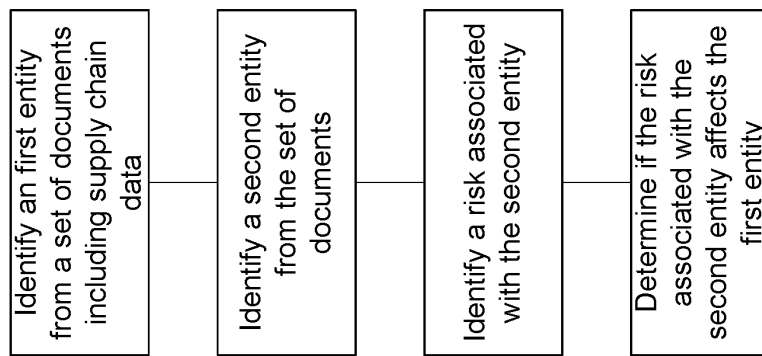


FIGURE 2



3000 ———→

FIGURE 3

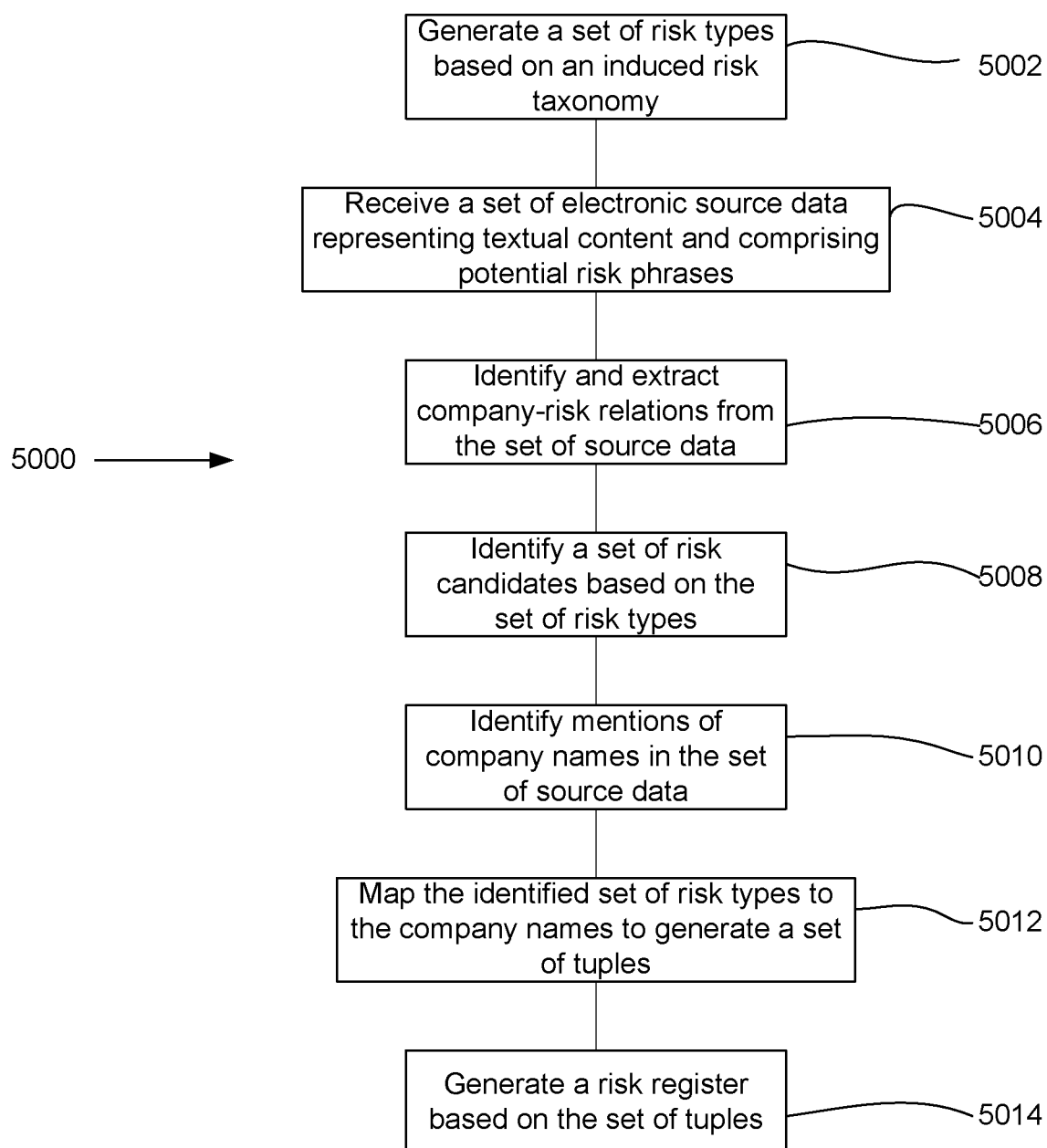


FIGURE 4

No.	Type	Name	Description
1.	vector<bit>	HAS-WORDS	bag of words of the sentence (binary vector of size $ ALPHABET $)
2.	double	N-TOK-SENTIM	number of tokens in the sentence for which sentiment gazetteer lookup has > 0 matches
3.	double[0..1]	PERC-SENT	percentage of words in the sentence that are potentially sentiment bearing ($N - TOK - SENTIM / LEN$)
4.	integer	DIST	distance in tokens between the risk phrase and the target
5.	binary	IS-RIGHT	if there are multiple candidate risk type terms, choose the nearest one
6.	string	SEQ-ALL-POS	location of the risk phrase (0: to the left, 1: to the right of the company name)
7.	string	SEQ-MAJ-POS	the sequence of POS tags between the company and the risk phrase, concatenated (e.g. "VVN_AT_NNS")
8.	double	TREE-KERNEL	the sequence of major POS tags (excluding function words/stop words) between the company and the risk phrase, concatenated (e.g. "VVN_AT_NNS")
9.	string	TOK-DEP-TOK	distance from hyperplane as classified by Moschitti-style tree kernel
10.	string	POS-DEP-POS	triple comprising two tokens and the dependency between them
11.	string	TOK-UNIGRAM	triple comprising two part of speech (POS) tags and the dependency between them
12.	string	TOK-BIGRAM	triple comprising individual tokens e.g. SEC
13.	string	TOK-TRIGRAM	triple comprising 2 subsequent tokens e.g. ongoing_litigation
14.	string	POS-UNIGRAM	triple comprising 3 subsequent tokens e.g. was_fined_for
15.	string	POS-BIGRAM	individual part of speech
16.	string	POS-TRIGRAM	tuple comprising 2 subsequent parts of speech
17.	double	PERC-POS	triple comprising 3 subsequent parts of speech
18.	double	PERC-NEG	fraction of terms with positive sentiment
19.	integer	DISTANCE	fraction of terms with negative
20.	string	RISK-RIGHT	distance between company and risk mentions in tokens
21.	string	SEQ-MIN-POS	risk to the right of the company
			the sequence of all POS tags (including function words/stop words, ...)

FIGURE 5

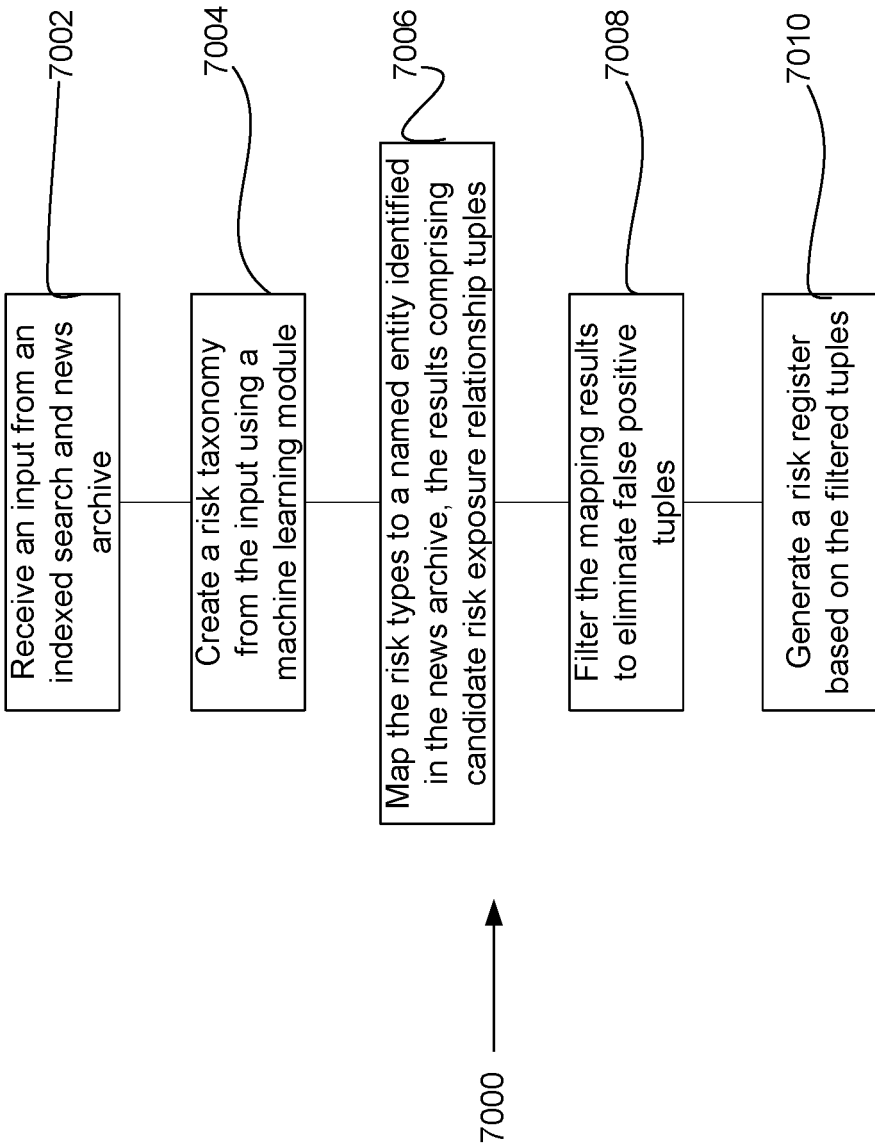


FIGURE 6

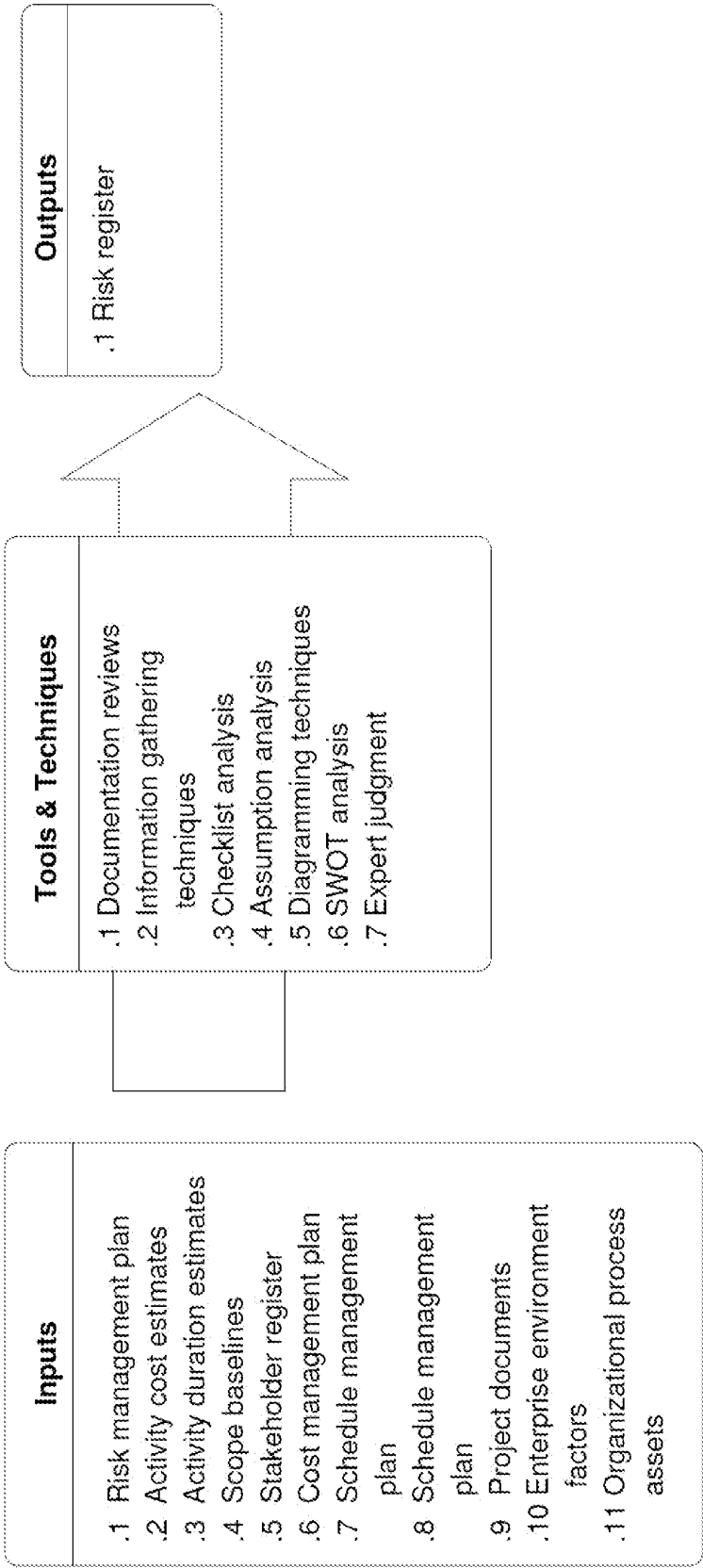


FIGURE 7

9002



Acme Inc.	
<i>Risk Type</i>	
office fire risk	
cash-flow risk	
litigation risk	
demand risk	

(a) Simple Risk Register.

9004



Acme Inc.			
<i>No.</i>	<i>Risk Type</i>	<i>Likelihood</i>	<i>Impact</i>
1	office fire risk	low	high
2	cash-flow risk	medium	fatal
3	litigation risk	medium	high
4	demand risk	medium	high

(b) Extended Risk Register.

FIGURE 8

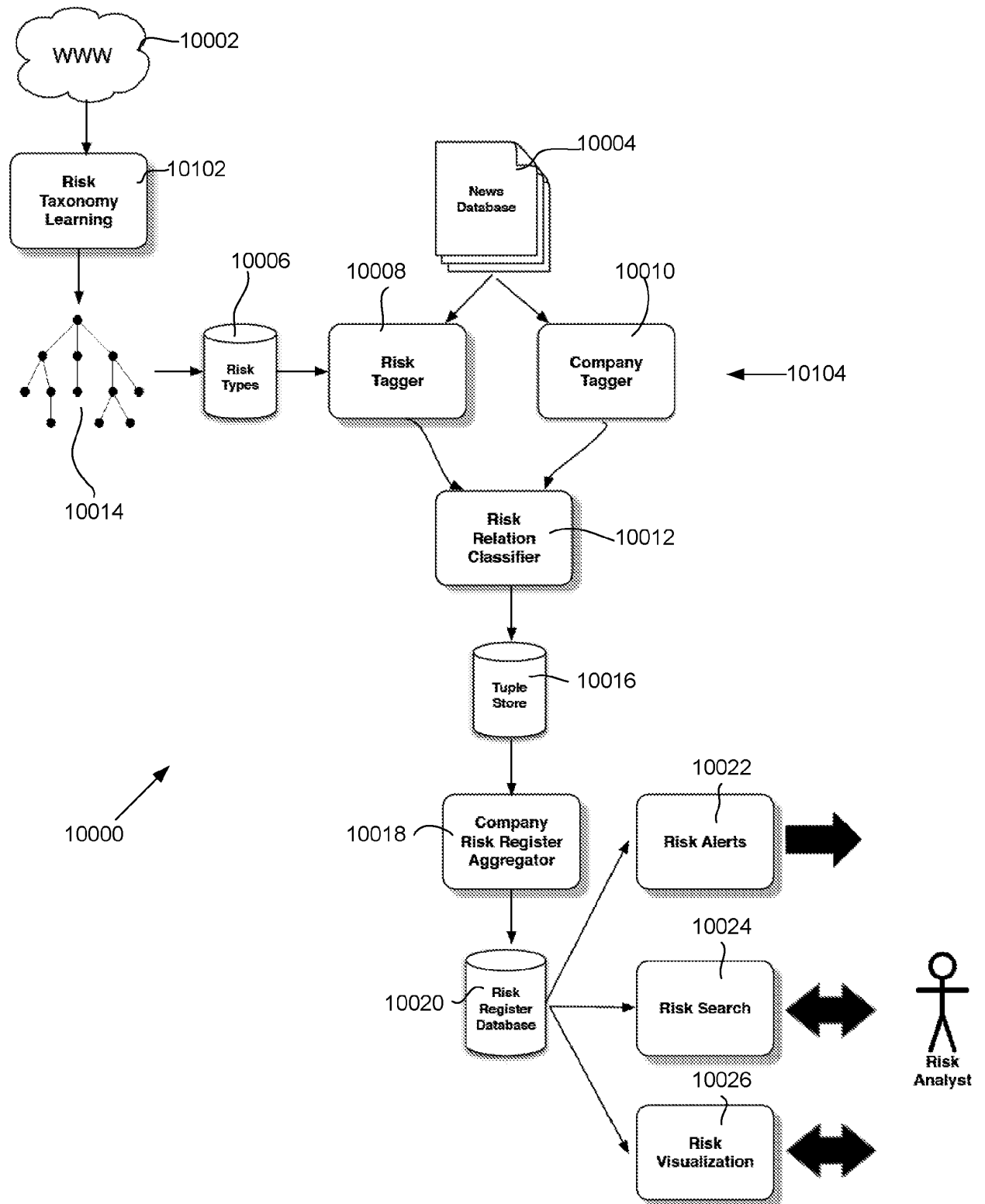


FIGURE 9

Acme Inc.
<i>Risk Type</i>
office fire risk
cash-flow risk
copyright litigation risk
demand risk

(a)

Acme Inc.	
<i>Risk Type</i>	<i>Count</i>
office fire risk	1
cash-flow risk	2
copyright litigation risk	1
demand risk	14

(b)

FIGURE 10

Acme Inc.	
<i>Risk Type</i>	<i>Management</i>
office fire risk	transfer (buy fire insurance)
cash-flow risk	mitigate (apply for credit line)
copyright litigation	mitigate (submit manuscripts to plagiarism checker)
demand risk	accept (do nothing)

FIGURE 11

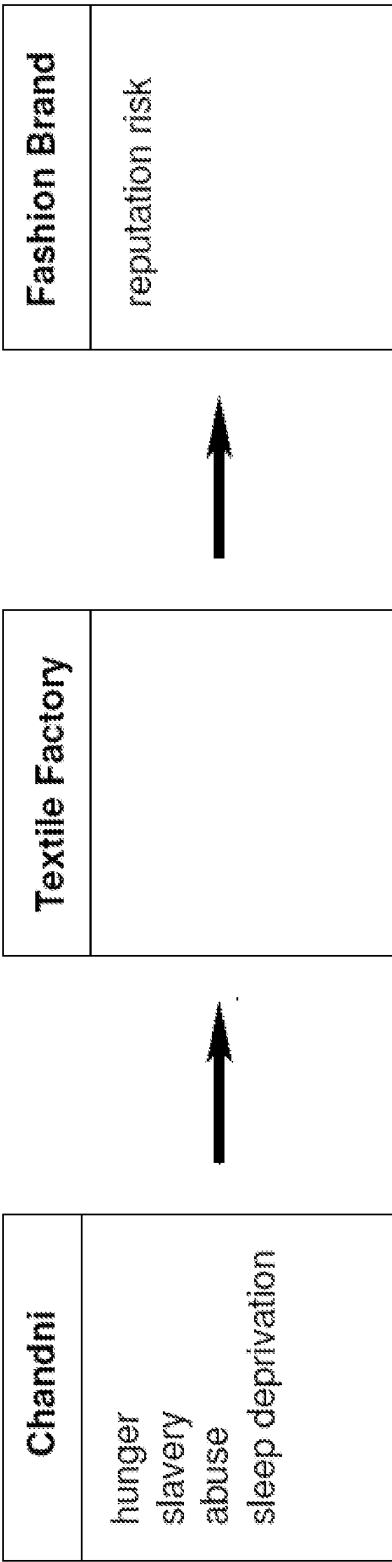


FIGURE 12

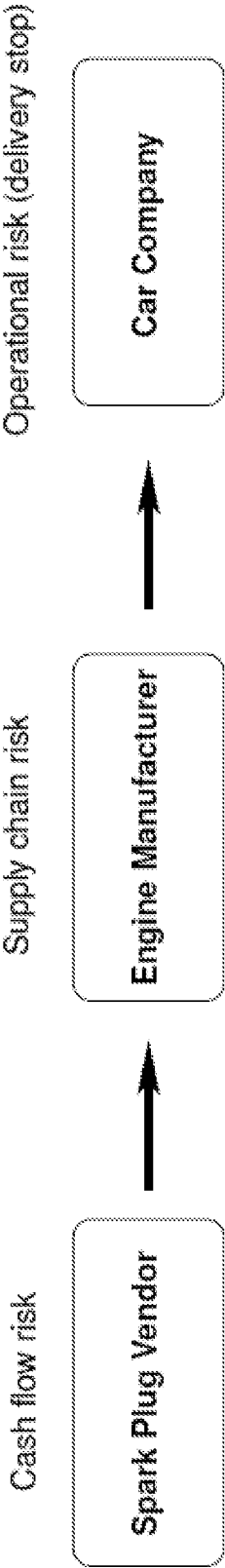


FIGURE 13

	Risk A	Risk B	Risk C	Risk D	...	Risk J	Risk K
Company A		■				■	
Company B	■	■					
Company C			■			■	
Company D				■			
Company E	■						■

FIGURE 14

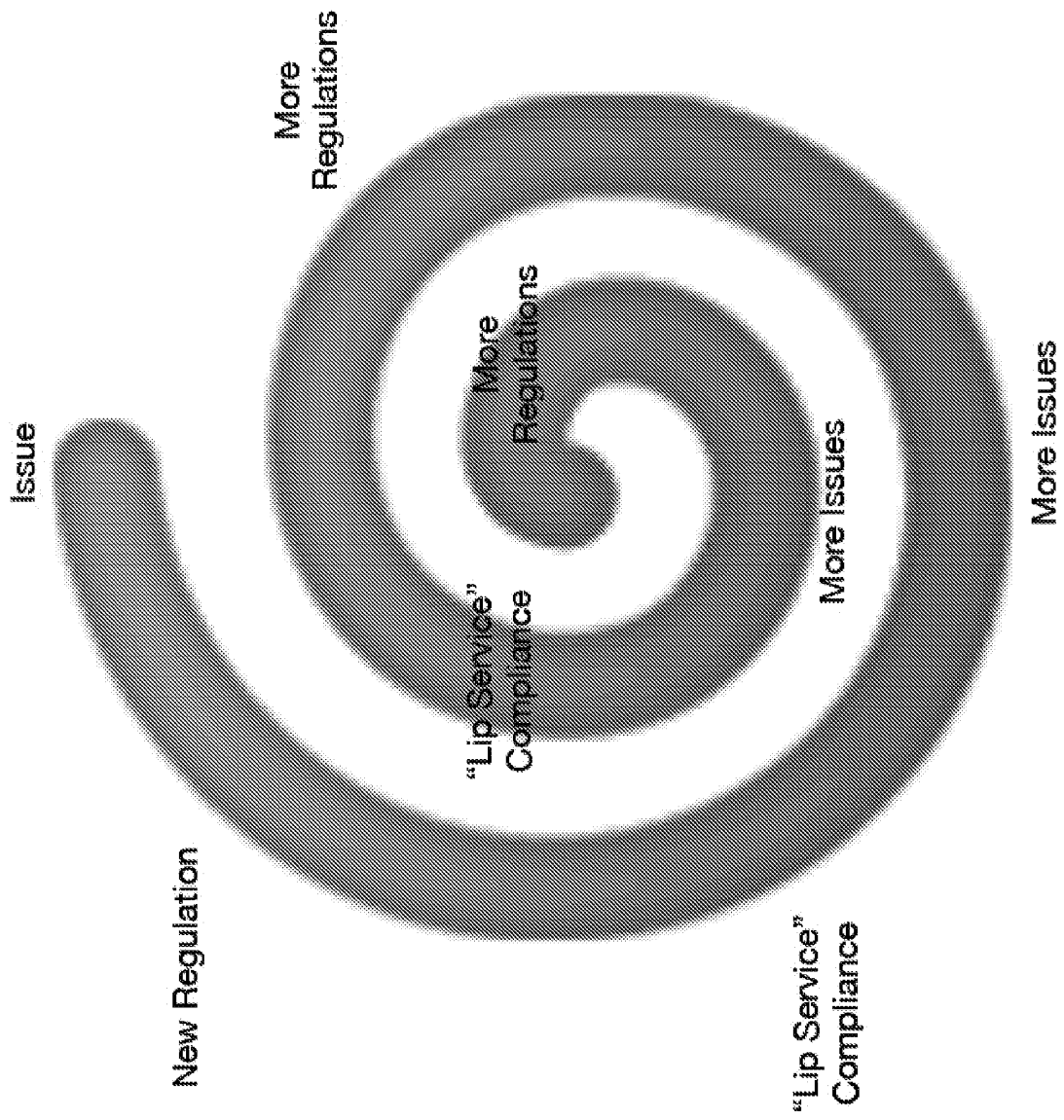


FIGURE 15



FIGURE 16

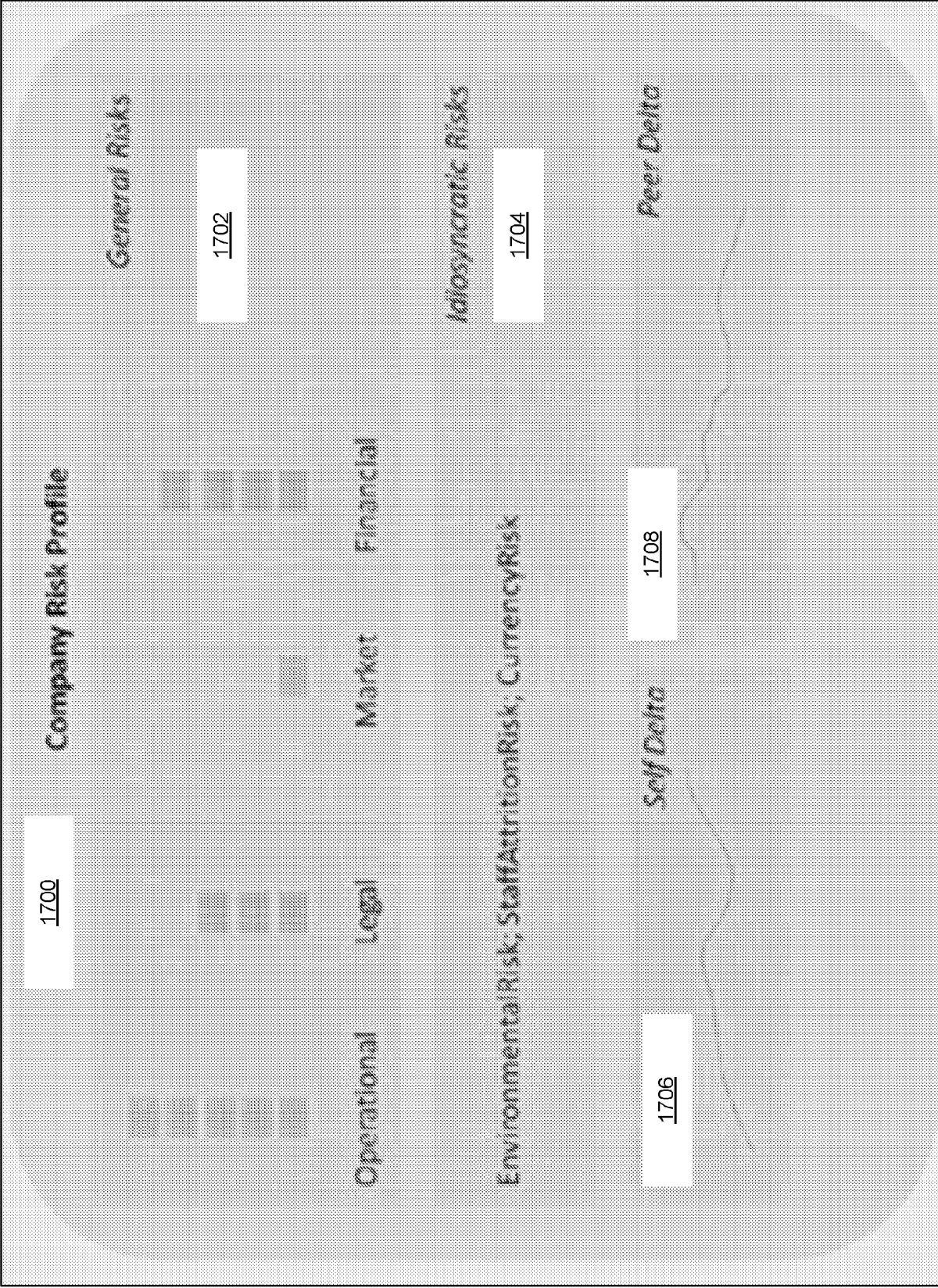


FIGURE 17

Idiosyncratic Risks	
	Risk
	fire risk
	natural disasters
	fraud
	claims
	legal activities
	contracting
	political violence
	crime
	nonpayment
	credit risk
	inability
	oil spills
	health risk
	obsolescence
	default
	operational risk
	price fluctuations
	illness
	risk
	market risk
	inflation
	regulation
	breakdown
	lawsuits
	litigation
	stability
	environmental damage

Figure 18

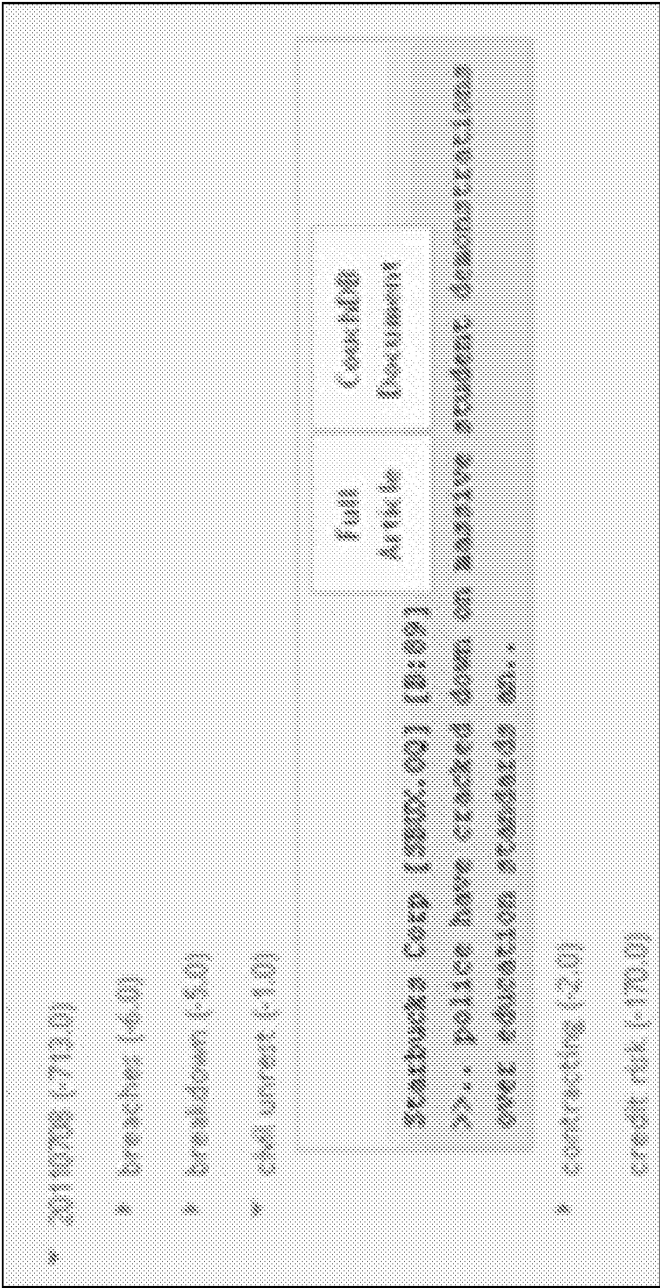


FIGURE 19

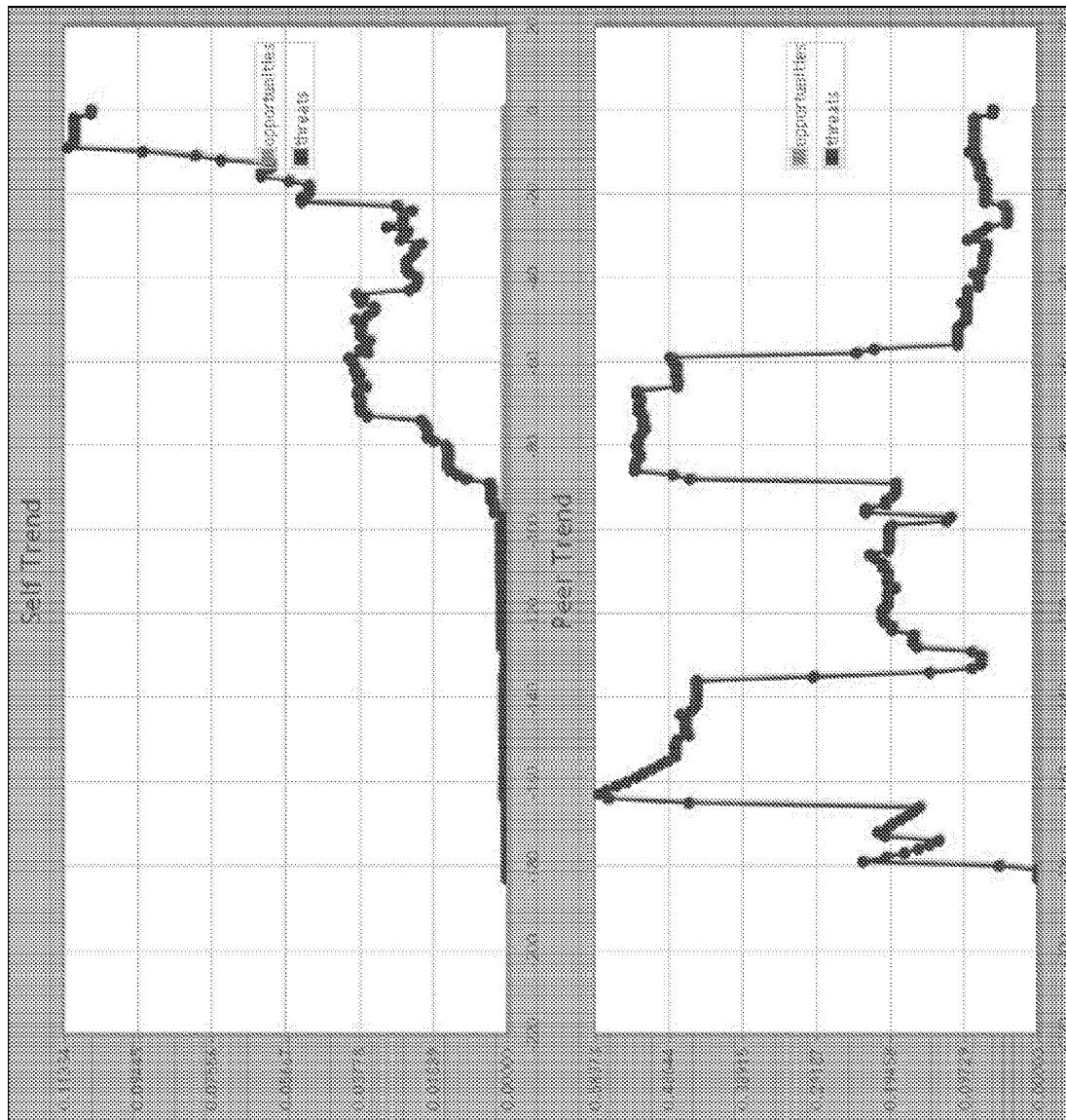


FIGURE 20

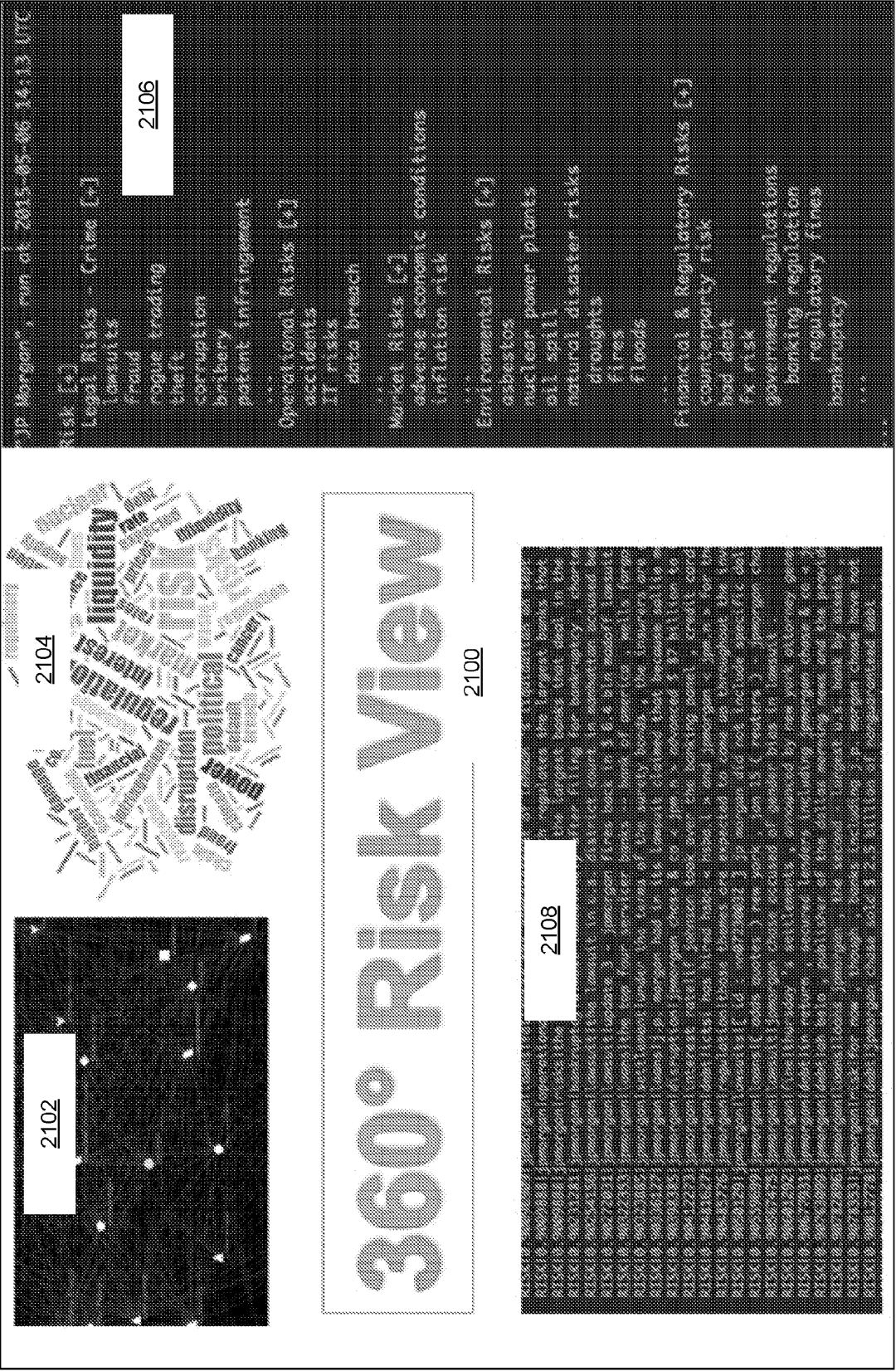


FIGURE 21

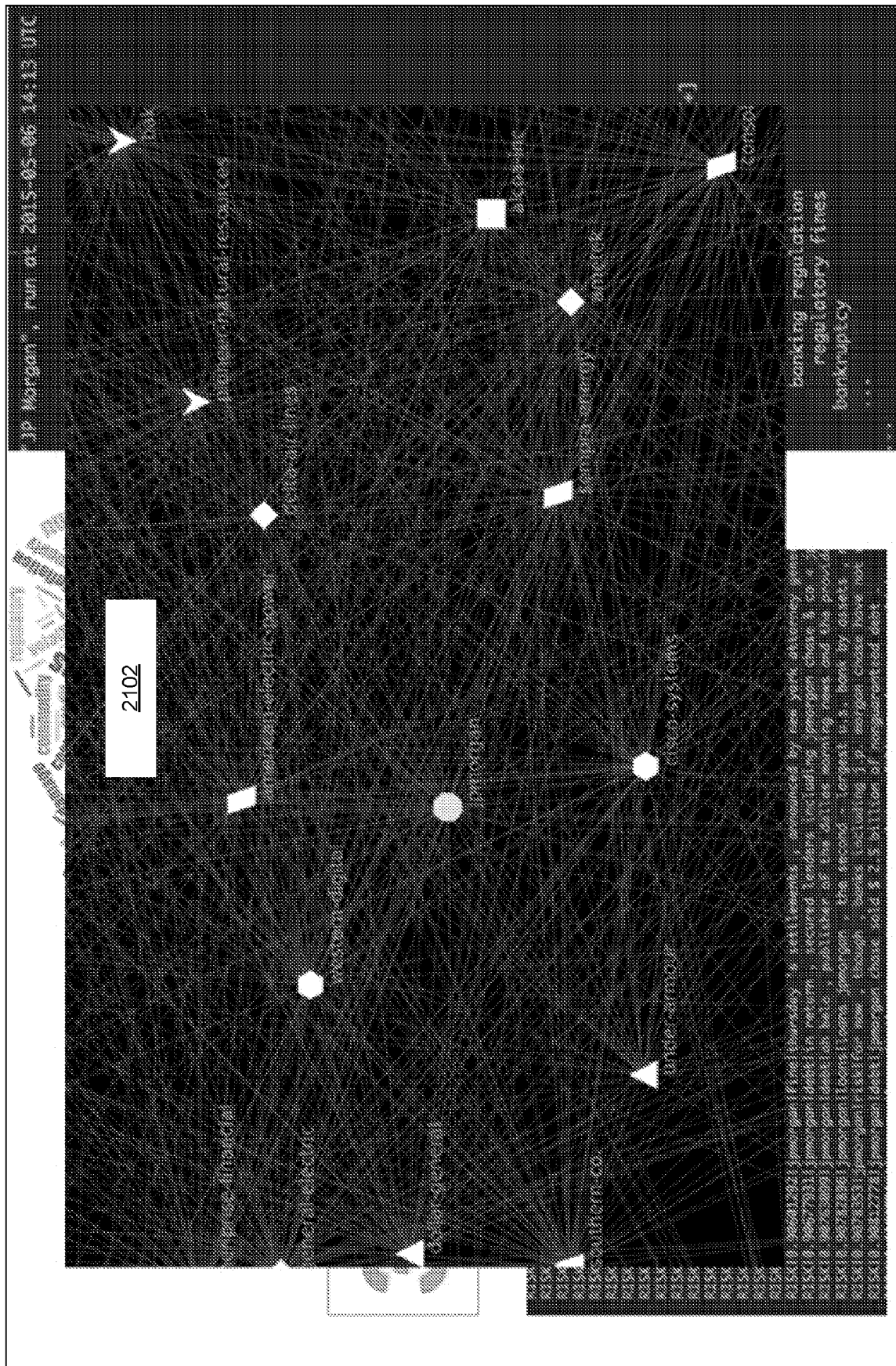


FIGURE 22

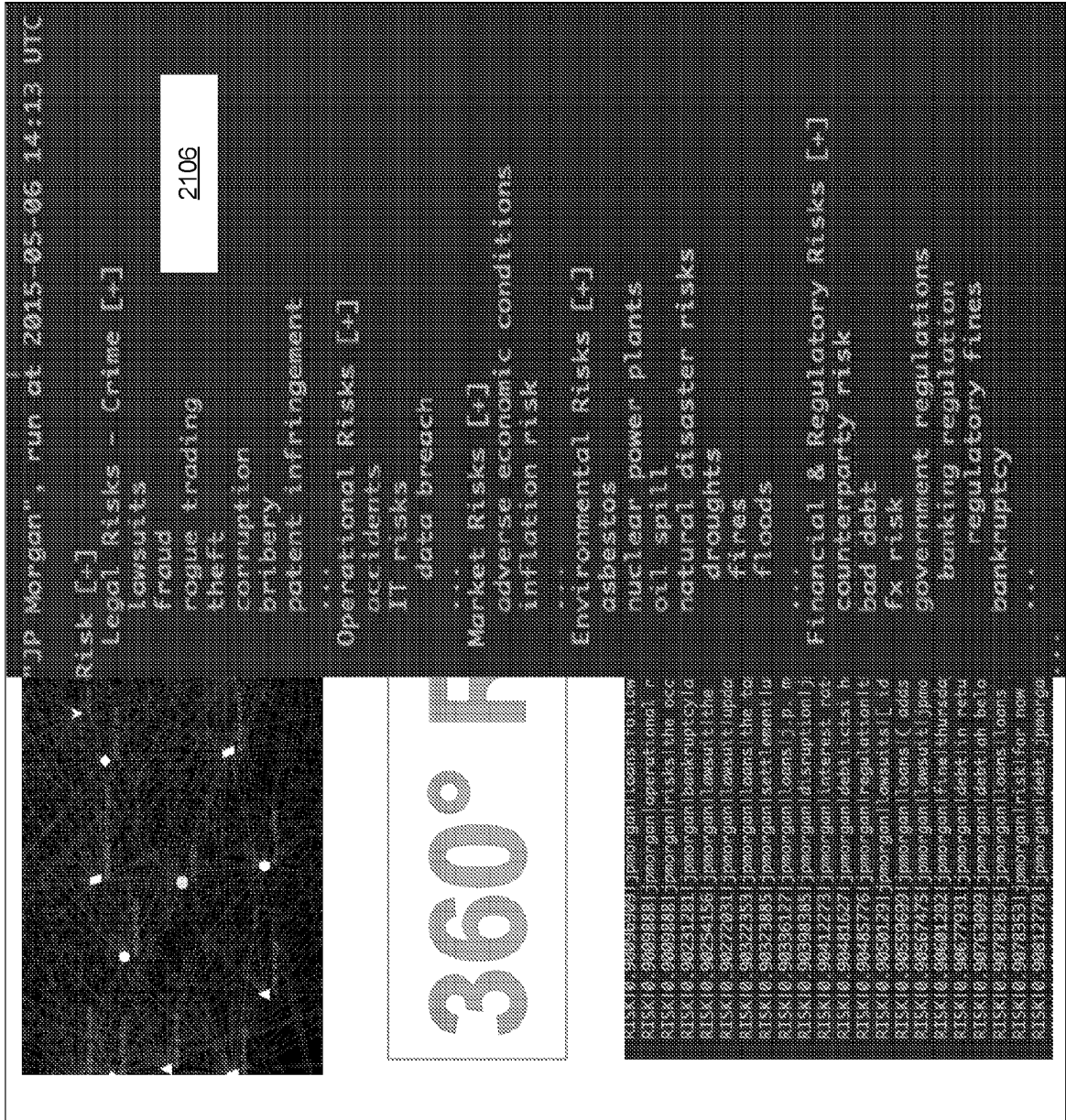


FIGURE 23

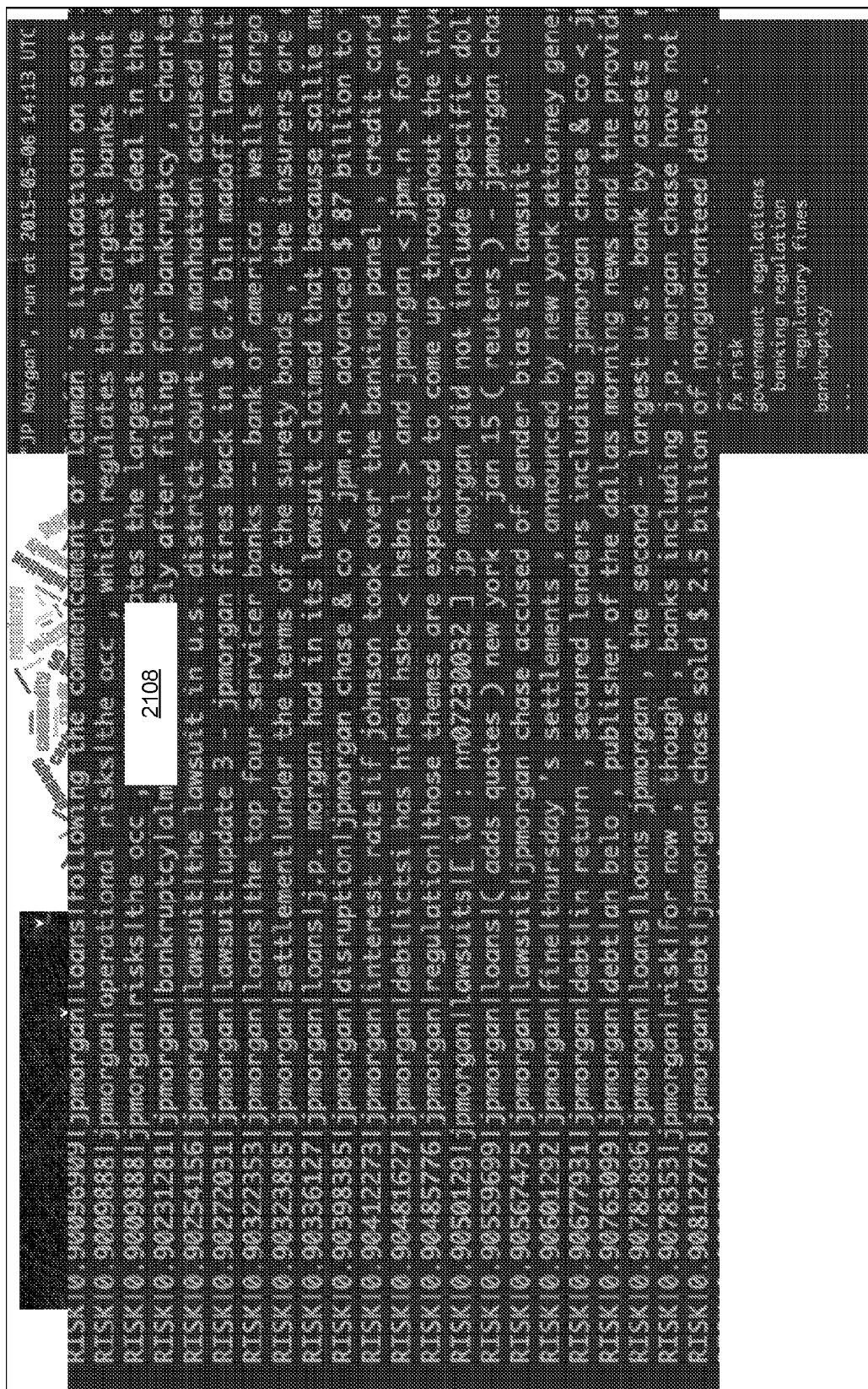


FIGURE 24

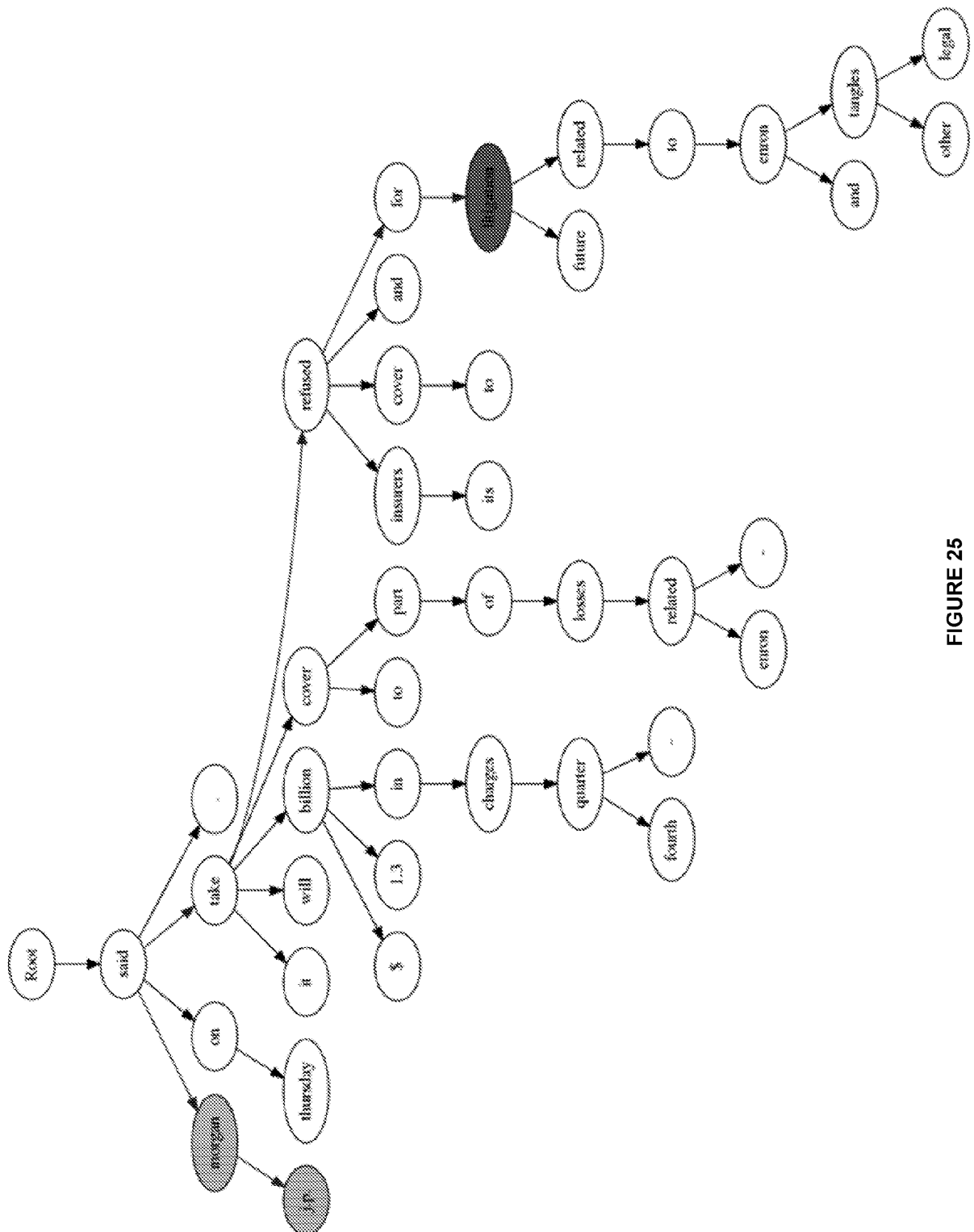


FIGURE 25

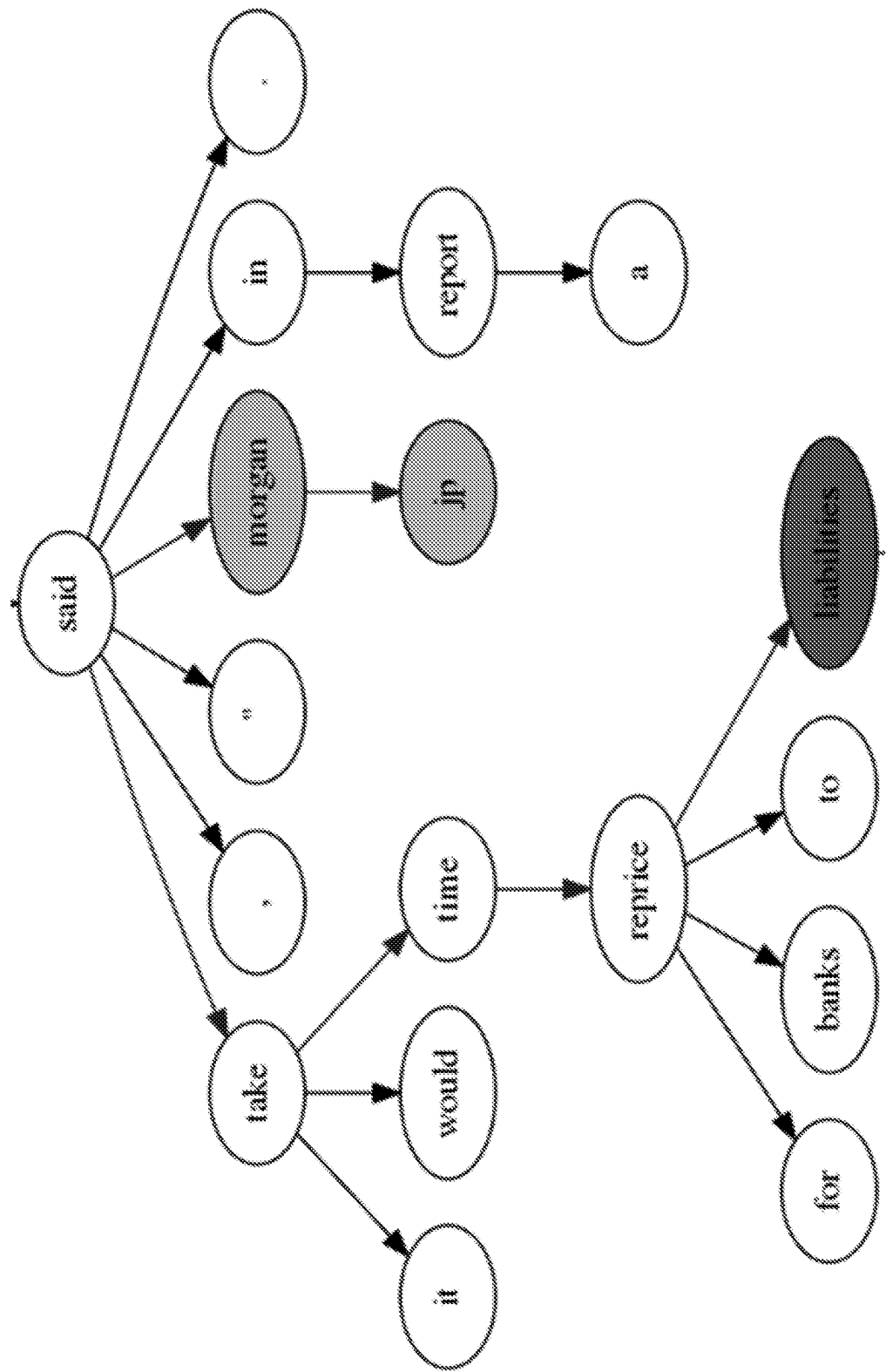


FIGURE 26

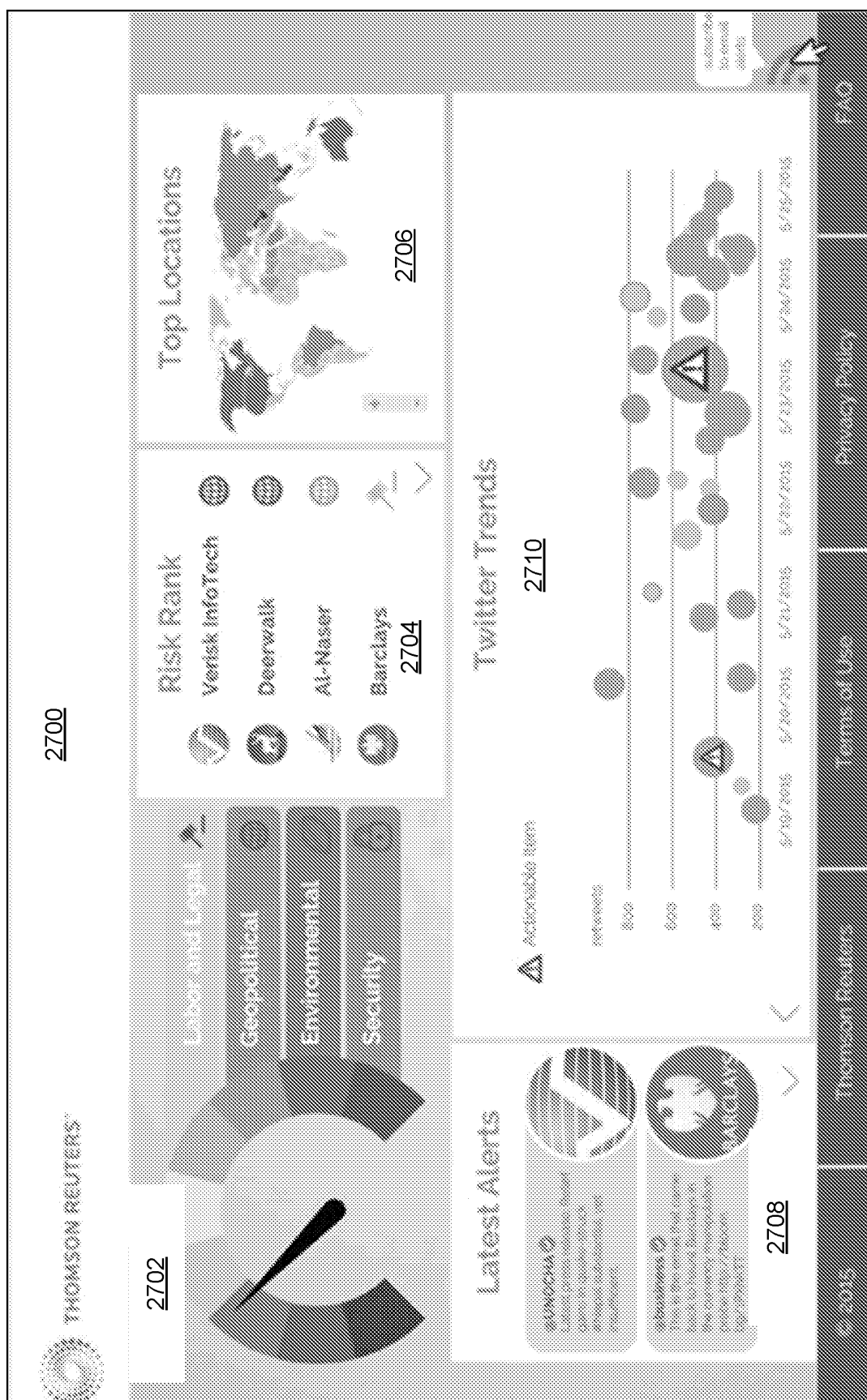


FIGURE 27

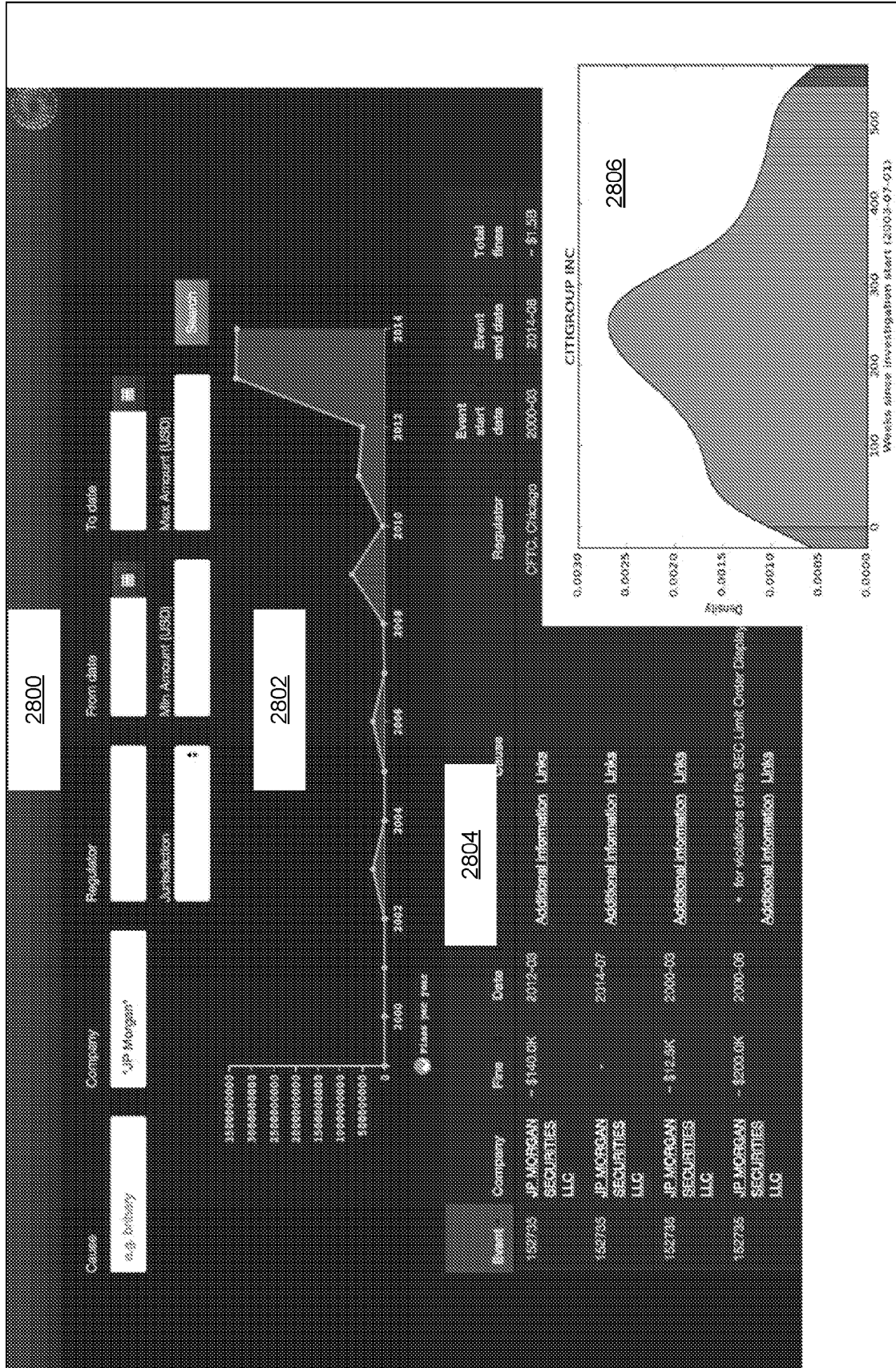


FIGURE 28

SWOT Analysis for Marks & Spencer

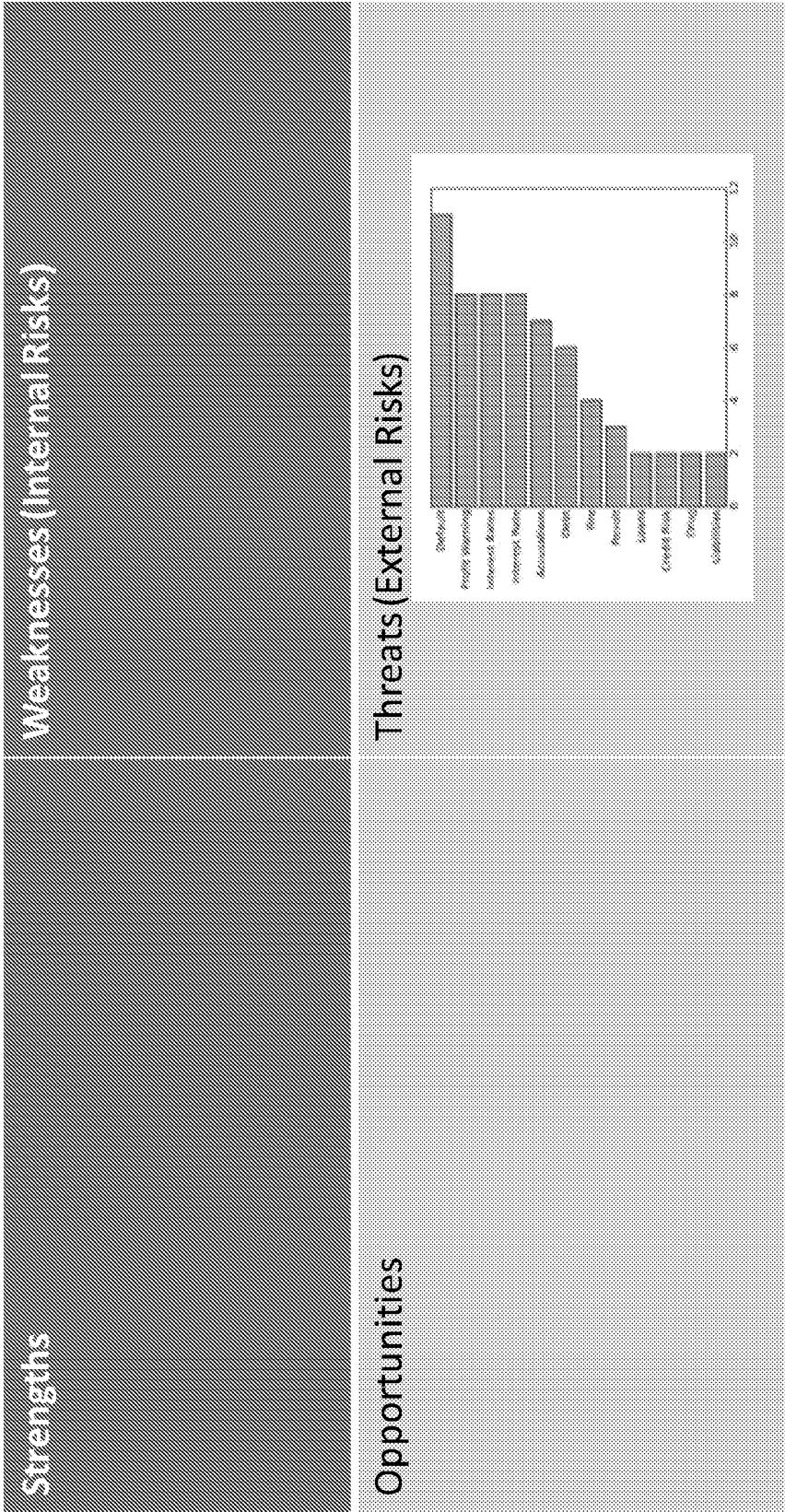


FIGURE 29