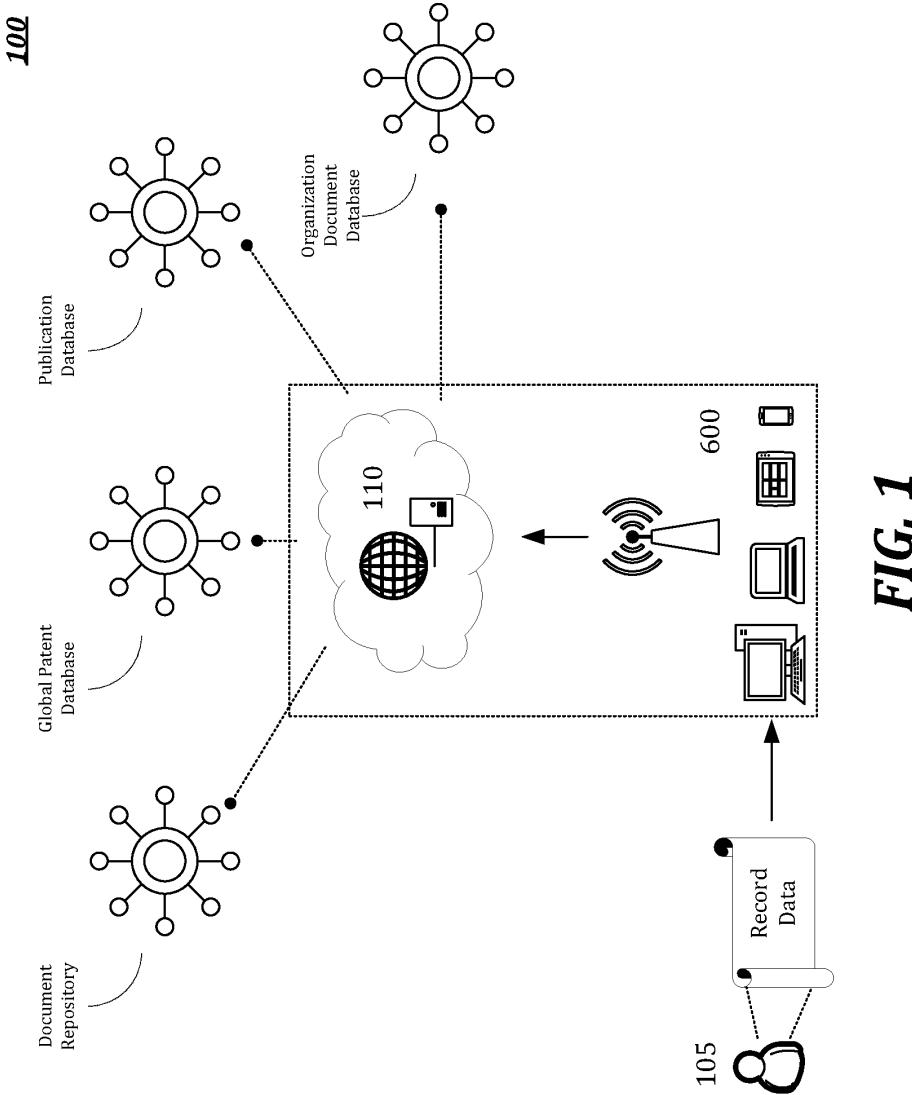




Choose Terms field:

Choose Year field:

Optional:

Choose Organization field:

Choose Person field:

Choose Country field:

Cleanup Terms List Options

☐ Run General Cleanup?

Optional - Choose a stopwords file:

☐ Use Fuzzy Match?

Set Emergence Criteria

Organization must have at least % of records and total records with emergent terms.

Person must have at least % of records and total records with emergent terms.

Country must have at least % of records and total records with emergent terms.

☐ Group Top Organization, Person, Country instead?

Calculate Emergence based on:

☐ Percentage Count ☒ Absolute Record ☐ Create Scores

Term must have at least:

Total Records

Years with at least 1 record

Ratio of Records in Selected Years to Baseline Years: Records %

Minimum terms occurring in more than % of Baseline years records

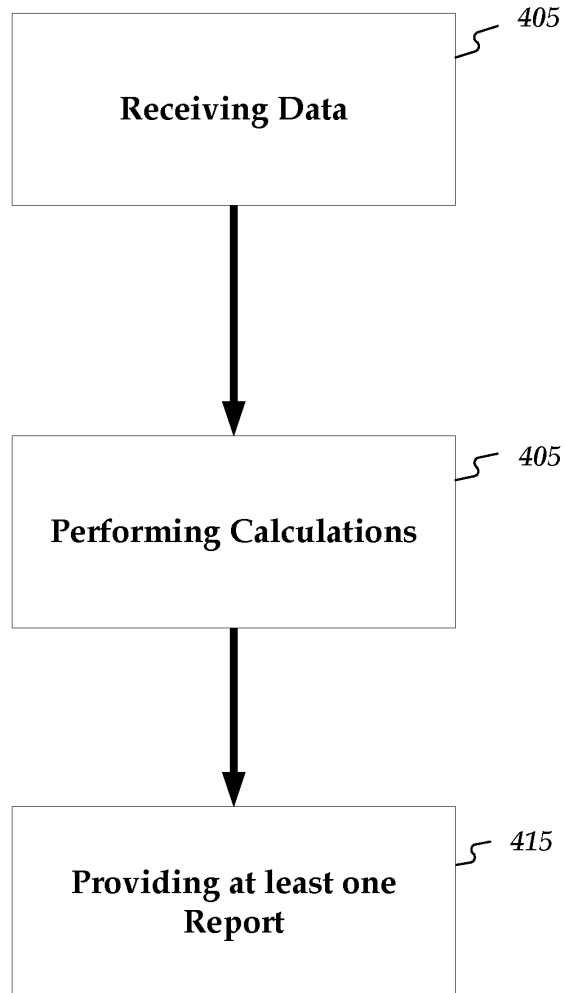
Number of Baseline Years to use in dataset

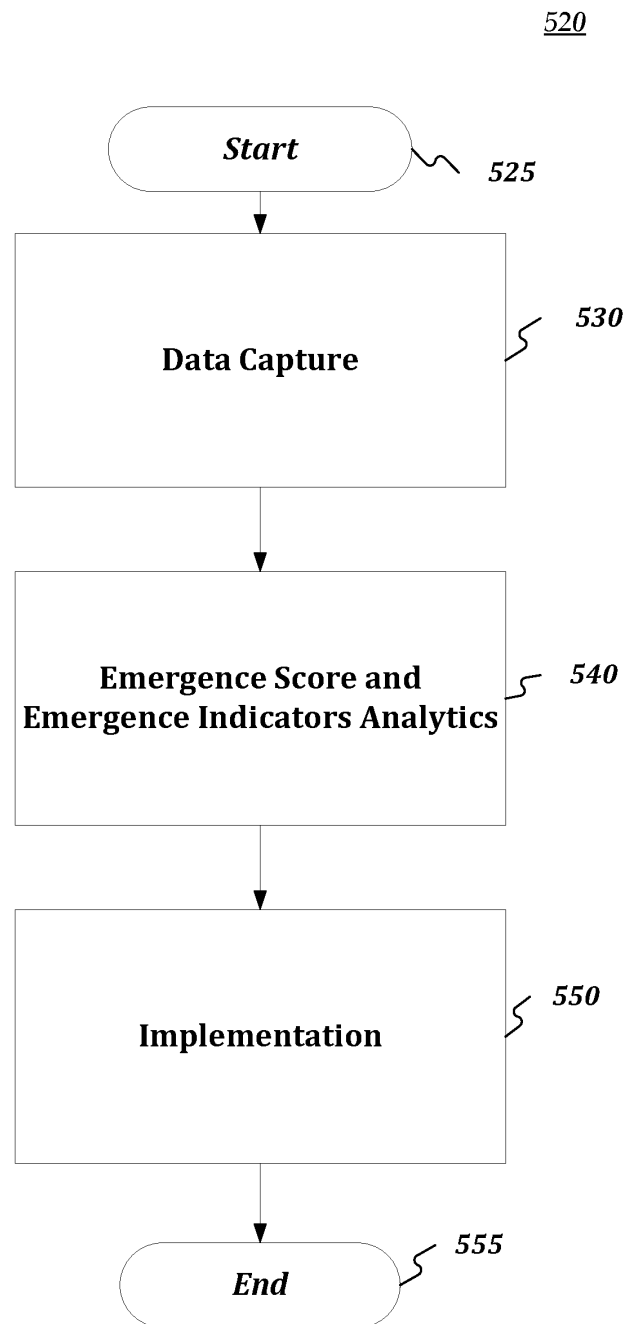
☐ Ignore latest year of data set? (in case of partial year)

FIG. 2

Emergence Scores			Term	Score
# Records	# Instances			
1	179	179	power conversion	13.063
2	174	174	power conversion efficiency	11.978
3	94	94	organic dye	9.278
4	121	121	electrochemical impedance	8.496
5	197	197	photovoltaic performance	8.185
6	128	128	electron microscopy	7.07
7	68	68	TiO ₂	7.066
8	51	51	absorption coefficient	6.714
9	46	46	TiO ₂ film	6.428
10	71	71	density functional theory	6.196
11	54	54	solar cell application	6.174
12	51	51	TiO ₂ nanotube	6.16
13	35	35	dye sensitized solar cell application	5.657
14	149	149	surface area	5.542
15	85	85	glass substrate	5.468
16	148	148	efficient conversion	5.338
17	126	126	impedance spectroscopy	5.033
18	291	291	open circuit voltage	4.965
19	95	95	electrochemical impedance spectroscopy	4.742
20	74	74	tin oxide	4.211
21	34	34	molar extinction coefficient	3.917
22	81	81	X-ray diffraction	3.863
23	30	30	nanotube array	3.839
24	82	82	photovoltaic property	3.727
25	22	22	TiO ₂ nanotube array	3.686
26	22	22	organic sensitizer	3.681
27	31	31	dye N719	3.635
28	106	106	overall conversion efficiency	3.61
29	152	152	fabricated	3.563
30	40	40	X-ray diffraction XRD	3.526
31	27	27	electron microscopy SEM	3.493
32	80	80	electron lifetime	3.334
33	41	41	density functional theory DFT	3.327
34	28	28	microscopy SEM	3.247
35	75	75	short circuit current	3.221
36	75	75	circuit current	3.221

FIG. 3

400**FIG. 4**

**FIG. 5**

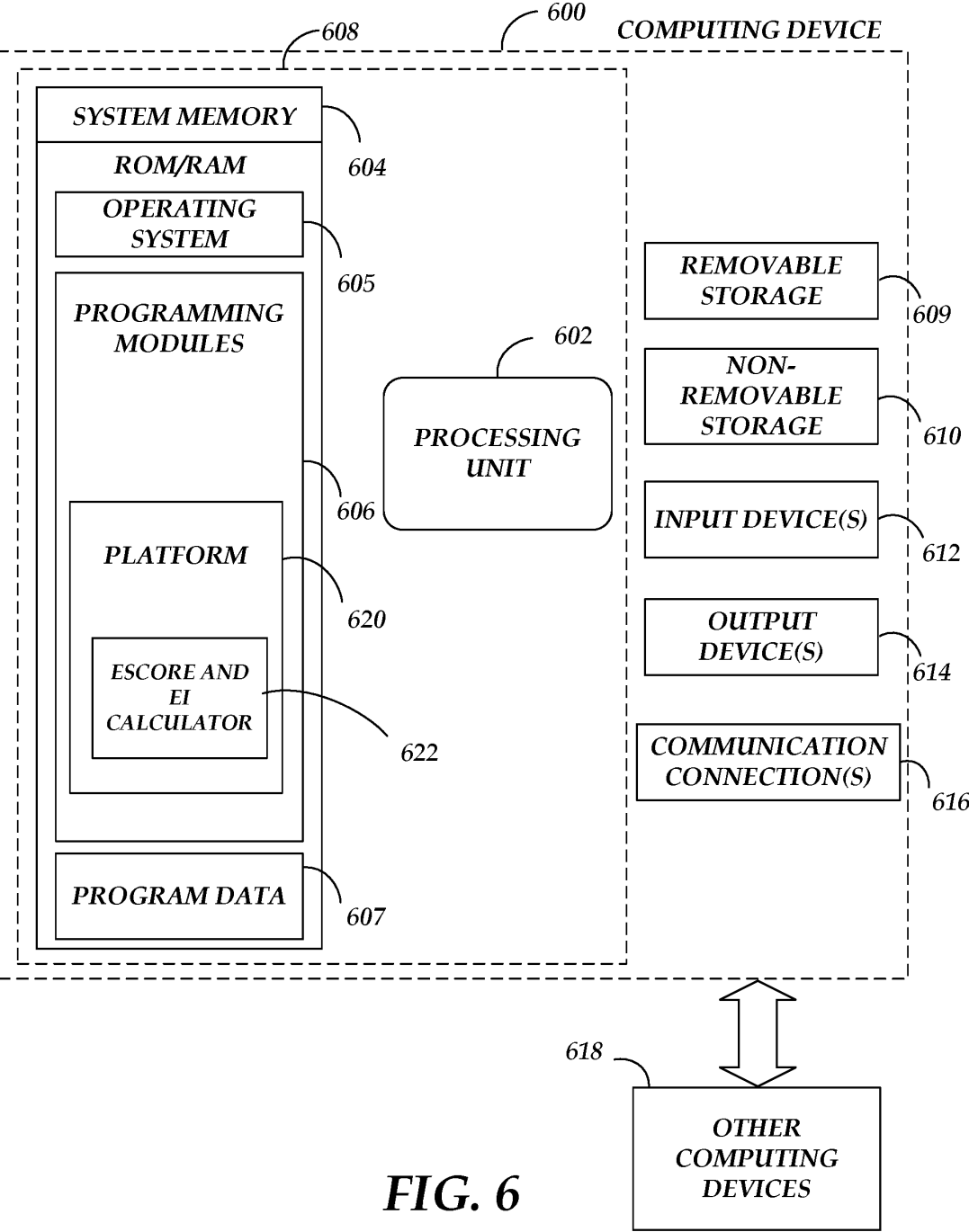


FIG. 6

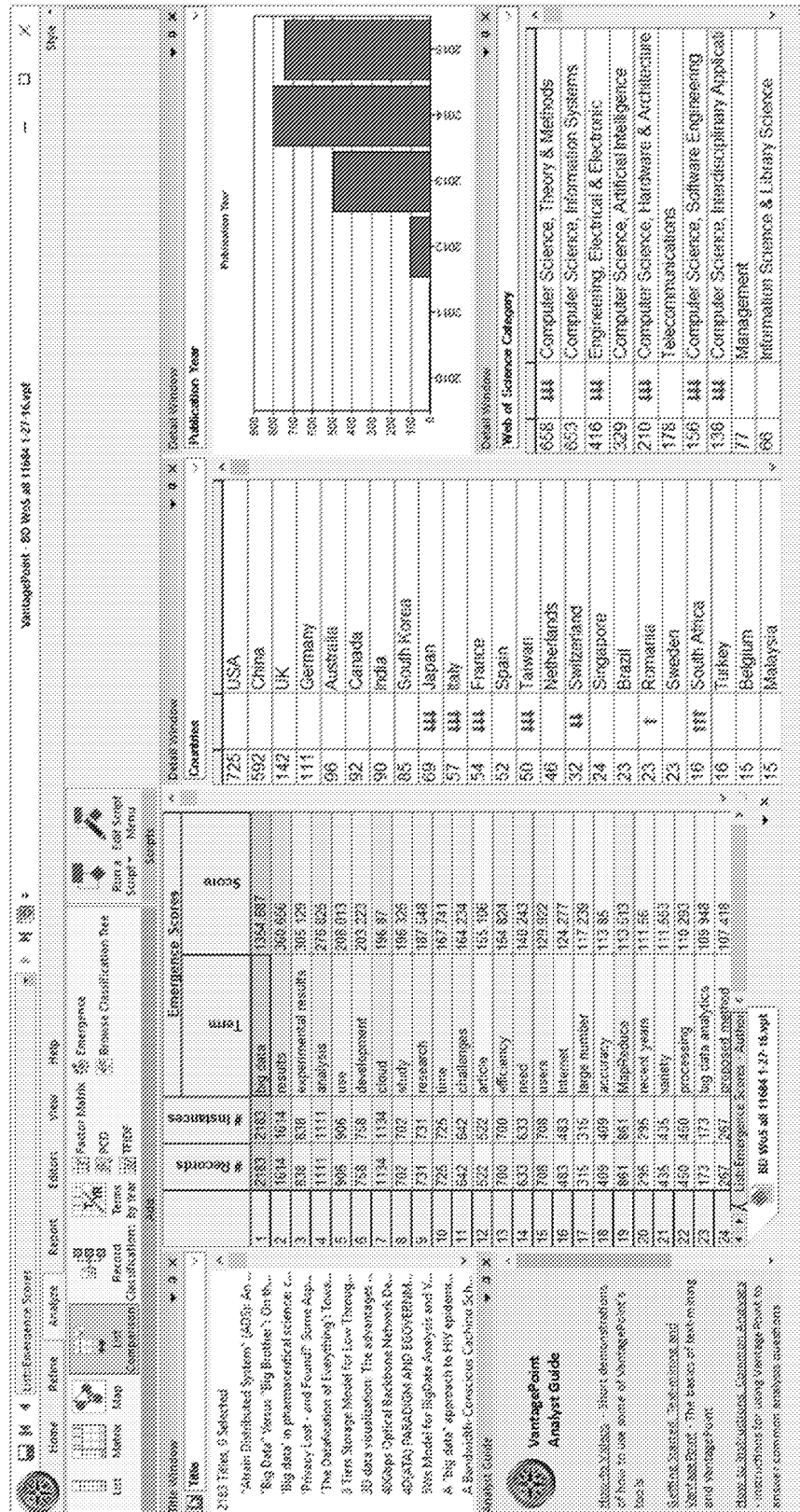


FIG. 7

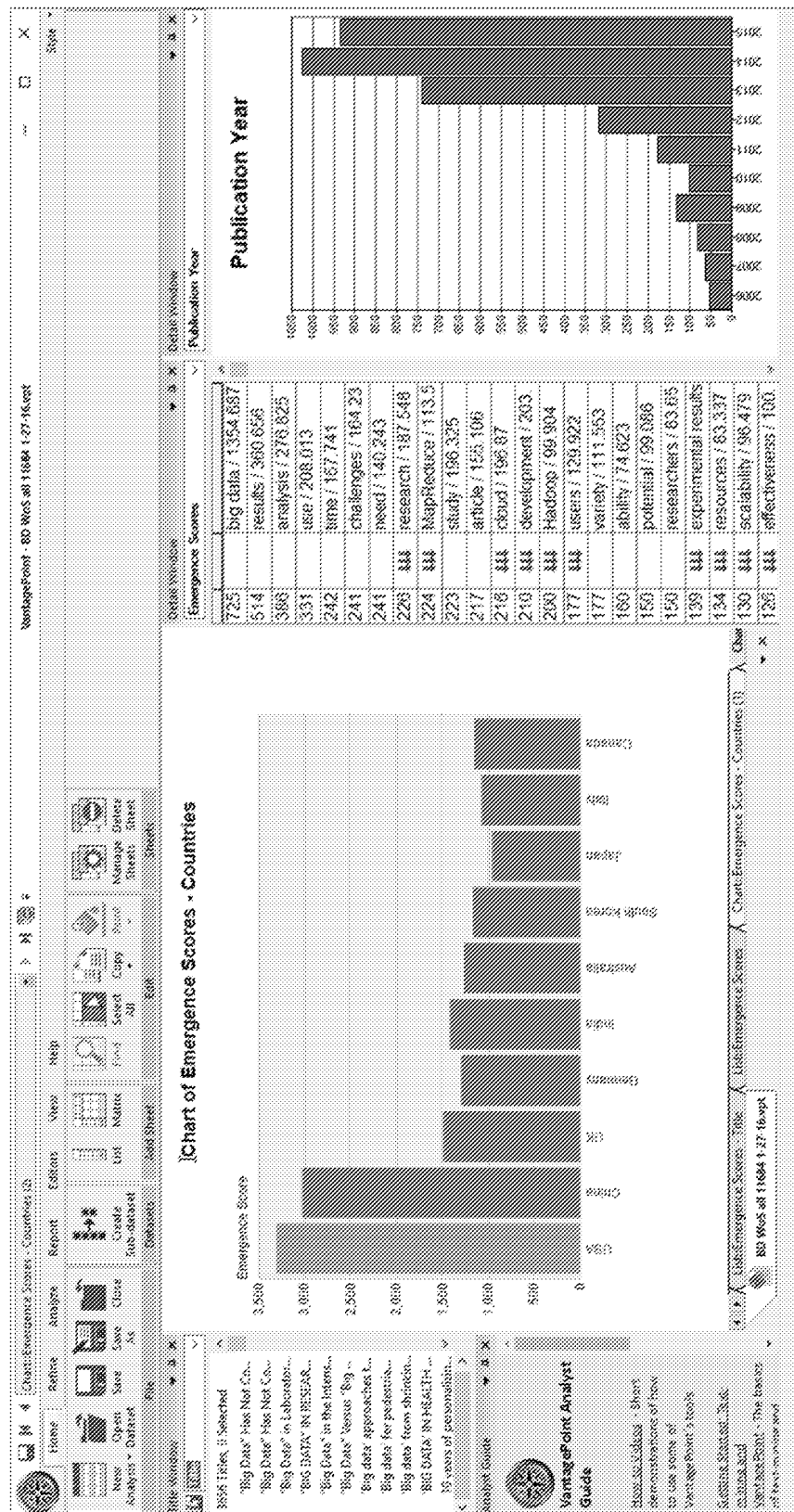


FIG. 8

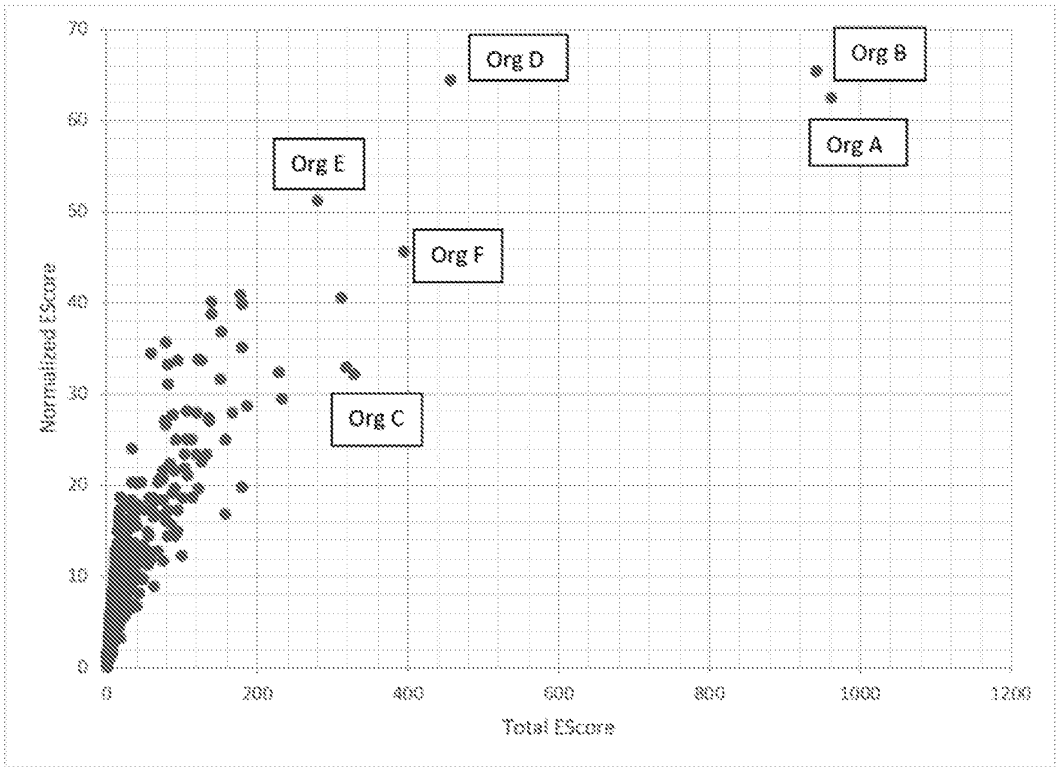


Figure 9A. Normalized vs. Total EScores for Leading Organizations Publishing on DSSCs

FIG. 9A

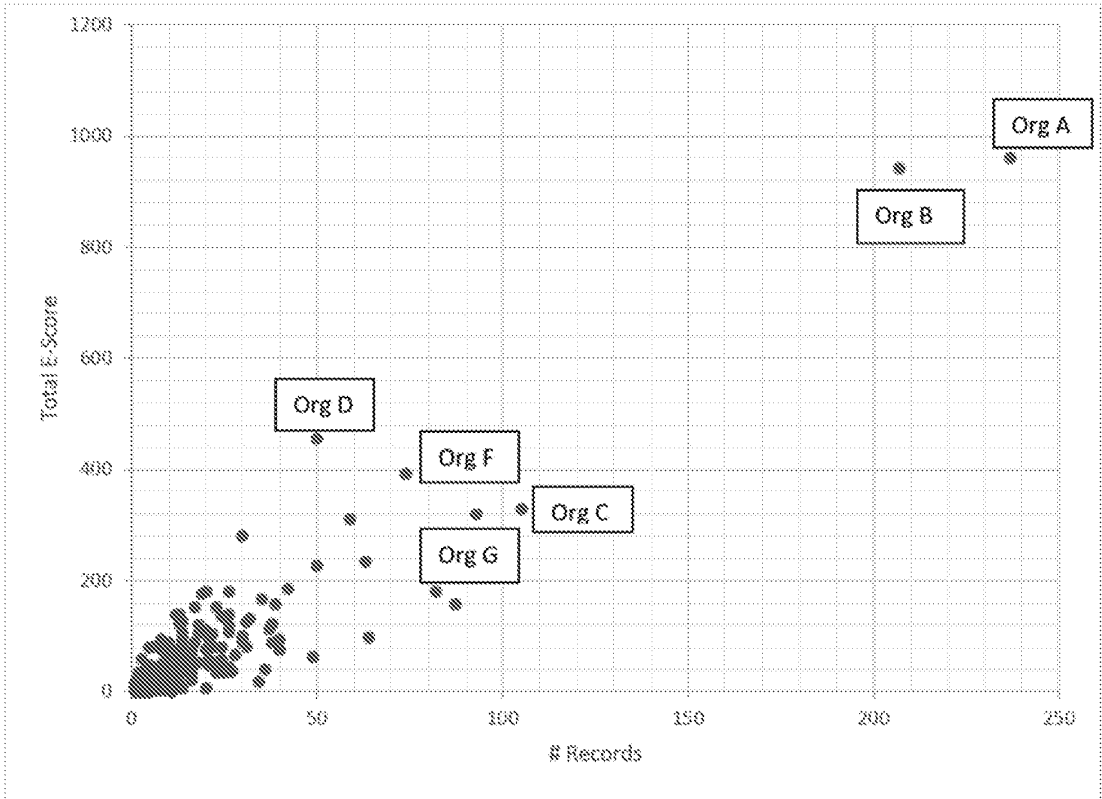


Figure 9B. Total EScores for Leading Organizations Publishing on DSSCs by Number of Publications

FIG. 9B

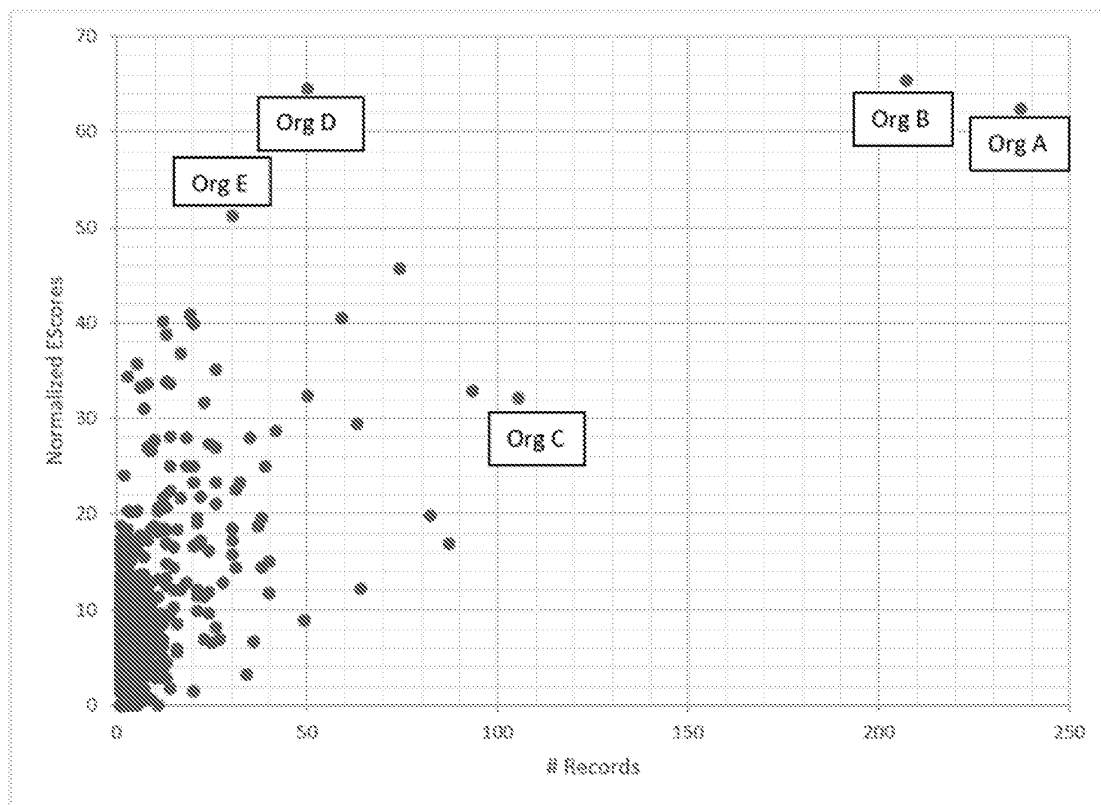


Figure 9C. Normalized EScores for Leading Organizations Publishing on DSSCs by Number of Publications

FIG. 9C

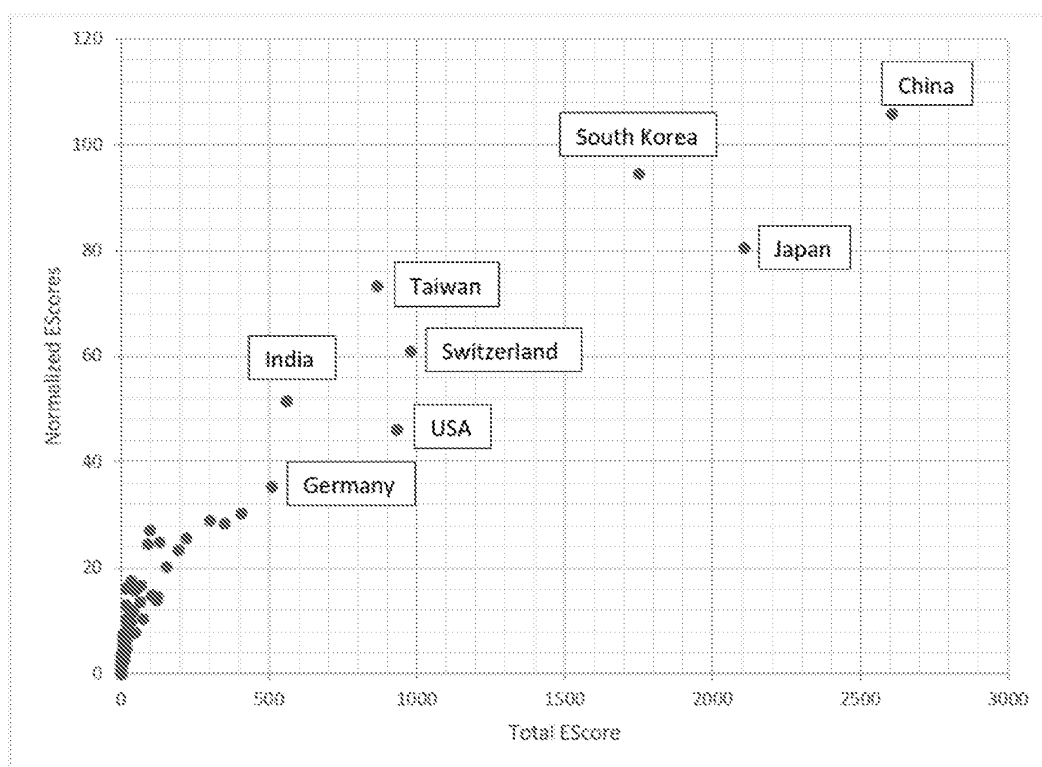


Figure 10A. Normalized vs Total Scores for Leading Countries Publishing on DSSC's

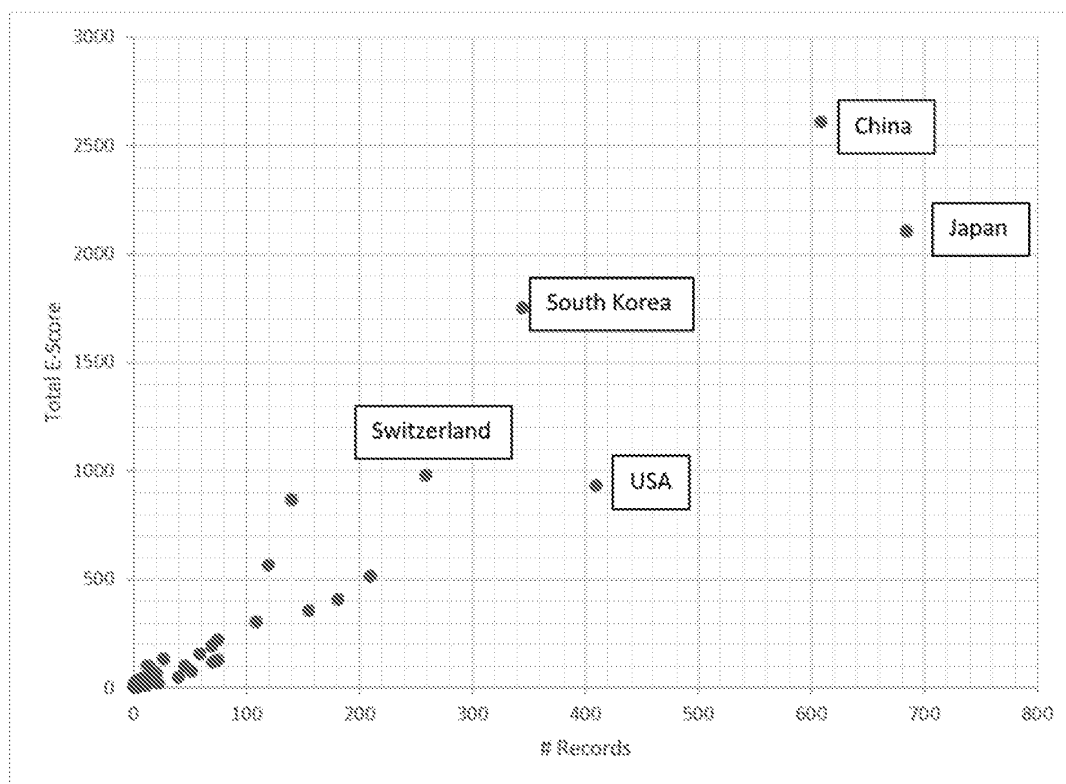
FIG. 10A

Figure 10B. Total Scores for Leading Countries Publishing on DSSCs by Number of Publications

FIG. 10B