"Transformer"（MLmodel）Patent Applications Worldwide Positioning Map

Map markers:
- US: 40
- GB: 1
- FR: 2
- EP: 7
- CN: 12
- KR: 4
- JP: 1
- AU: 1
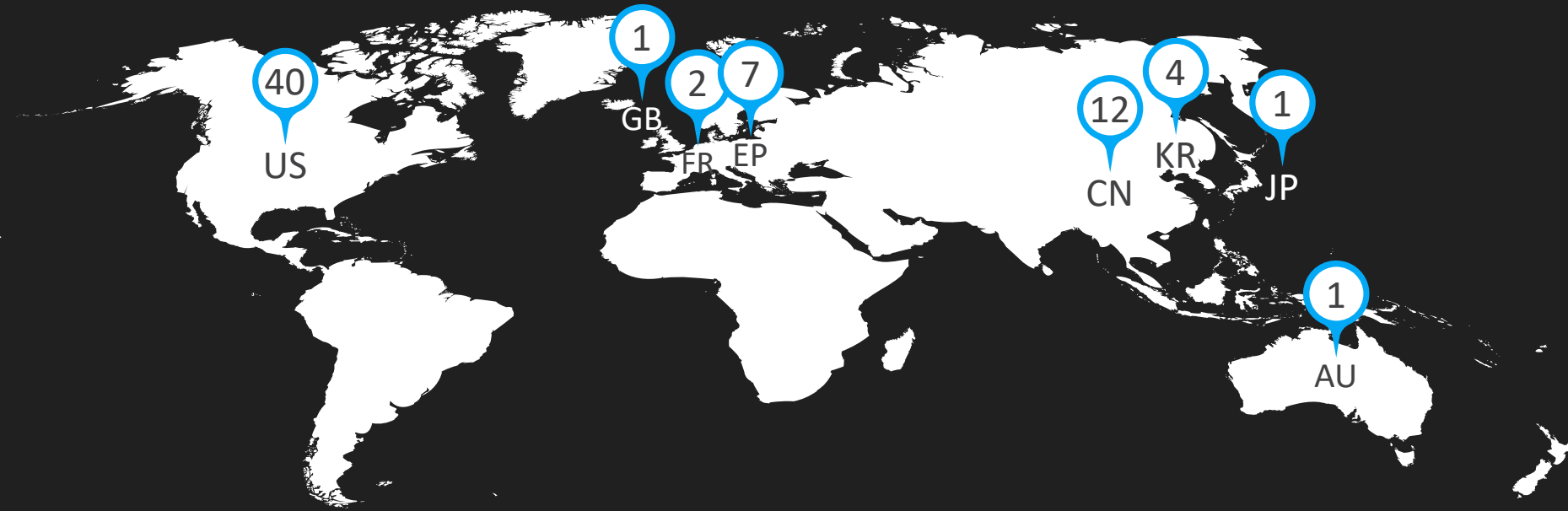
TOP 12 ASSIGNEES

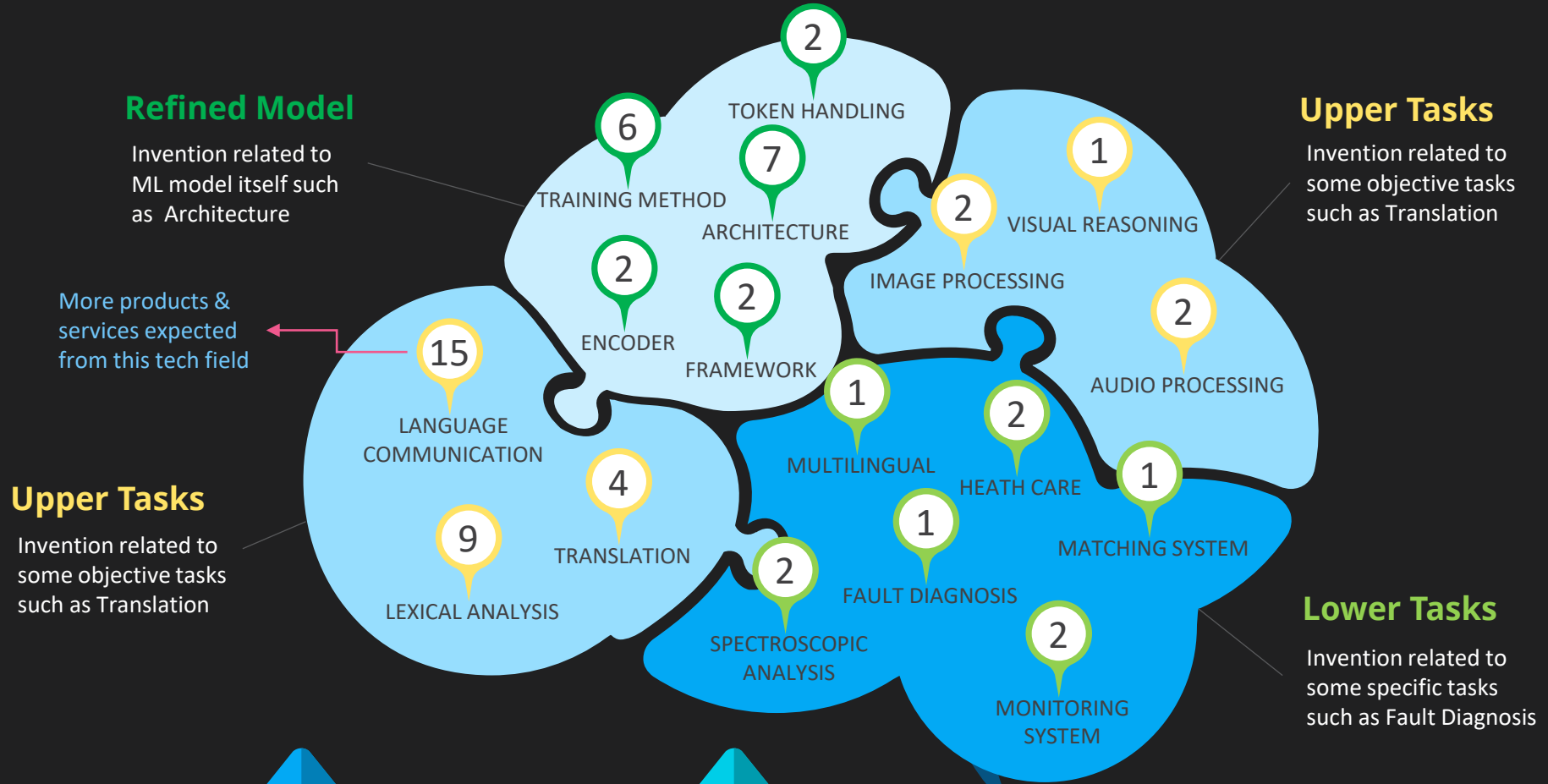|	CN	EP	IB	US	Total
MICROSOFT TECHNOLOGY LICENSING, LLC				5	5
UMNAI LIMITED		3		2	5
PING AN TECH SHENZHEN CO LTD	4				4
GOOGLE LLC				3	3
ZHEJIANG LAB	2			1	3
TELEPATHY LABS, INC.				2	2
APPLICA SP. Z O.O.			1	1	2
DEEPMIND TECHNOLOGIES LIMITED		2			2
X DEVELOPMENT LLC				2	2
Baidu USA LLC		1		1	2
SALESFORCE.COM, INC.				2	2
SEARCHABLE AI CORP				2	2
Total	6	6	1	21	34

Bar chart (applications per year):
- 2017: 1
- 2018: 3
- 2019: 7
- 2020: 18
- 2021: 28
- 2022: 6
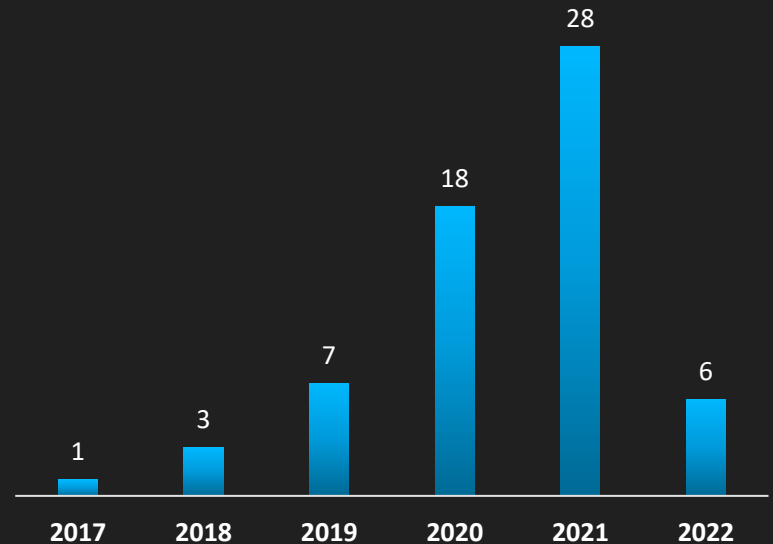
"Transformer"（MLmodel）Patent Applications Taxonomy Map

Refined Model

Invention related to ML model itself such as Architecture

More products & services expected from this tech field

Upper Tasks

Invention related to some objective tasks such as Translation

Upper Tasks

Invention related to some objective tasks such as Translation

Lower Tasks

Invention related to some specific tasks such as Fault Diagnosis

2 — TOKEN HANDLING
6 — TRAINING METHOD
7 — ARCHITECTURE
2 — ENCODER
2 — FRAMEWORK
15 — LANGUAGE COMMUNICATION
9 — LEXICAL ANALYSIS
4 — TRANSLATION
2 — VISUAL REASONING
1 — IMAGE PROCESSING
2 — AUDIO PROCESSING
1 — MULTILINGUAL
2 — HEATH CARE
1 — MATCHING SYSTEM
1 — FAULT DIAGNOSIS
2 — SPECTROSCOPIC ANALYSIS
2 — MONITORING SYSTEM

APPLICATIONS CAGR '17-'21
130%

ESTIMATED MARKET SIZE CAGR '21-'27
26.6%
*Source from Global Information Inc.'s Report

ESTIMATED MARKET LEADERS

UMNAI

平安科技
PING AN TECHNOLOGY