

2D/3D Dual Solid State LiDAR



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Specialized in 2D/3D Sensor

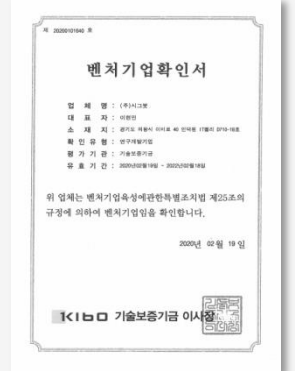
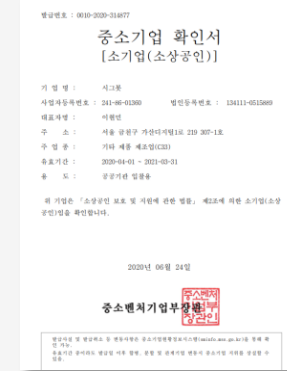
- 4 Patents , 1 Application
- Development of 2D/3D LiDAR Sensor
- Development of H/W, S/W, optical system
- Development of Robot system using LiDAR
- Development of image processing algorithm
- Development of Structured light distance measurement algorithm using DOE

Award

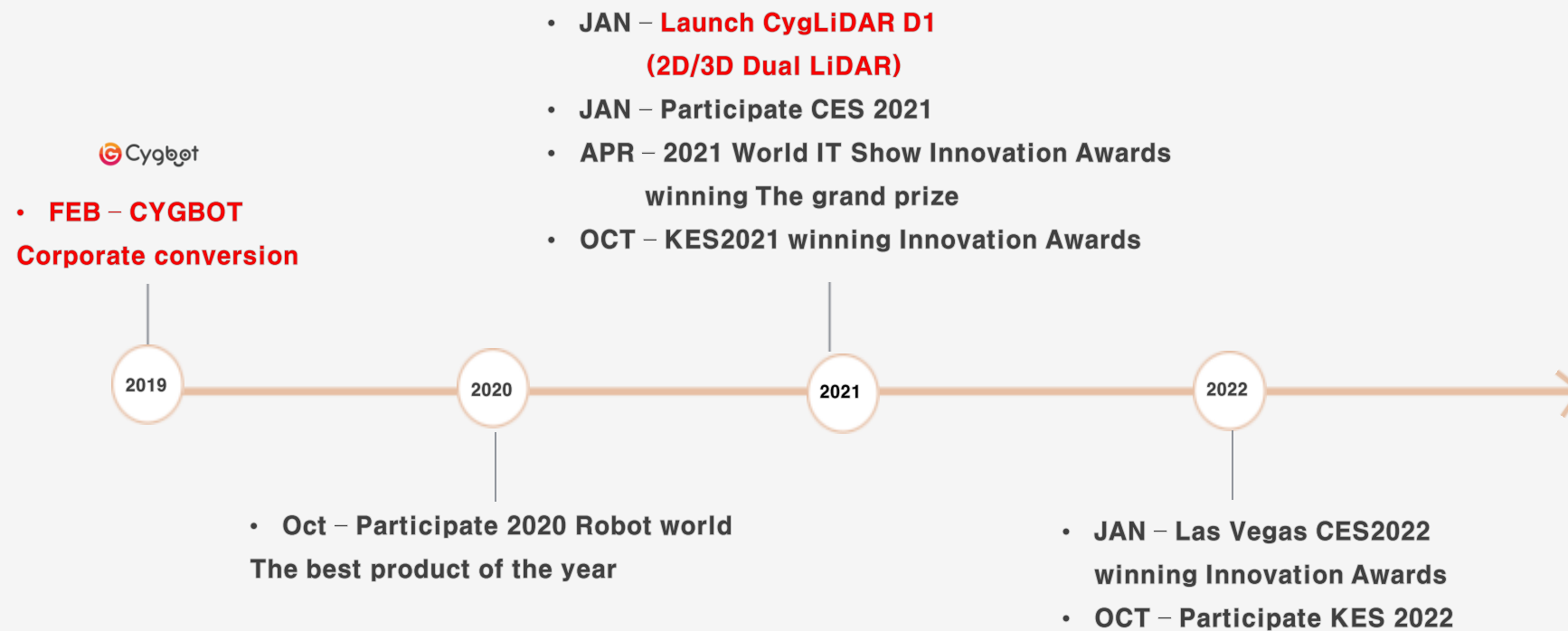
- 2020 Robot World awards
The best product of the year
- 2021 World IT Show Innovation awards
The grand prize
- 2021 KES Innovation awards
- 2022 CES Innovation awards



Certification / Patent

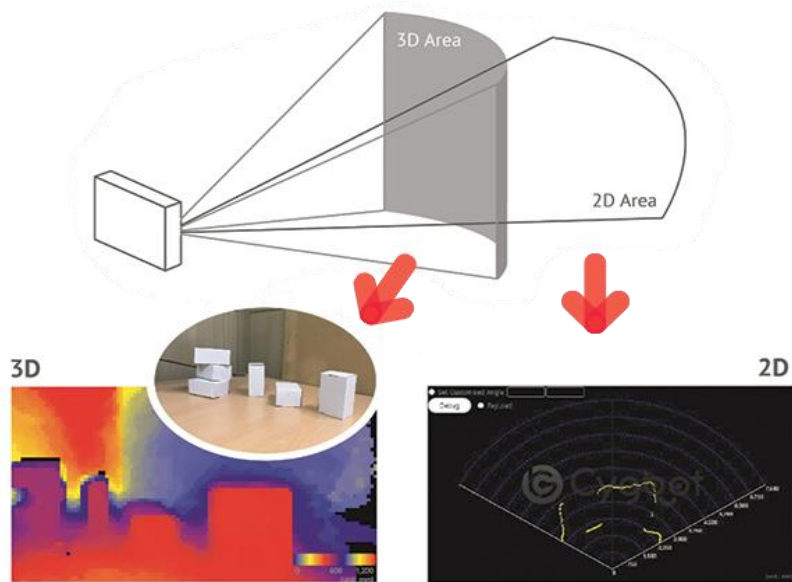


HISTORY



TECHNOLOGY

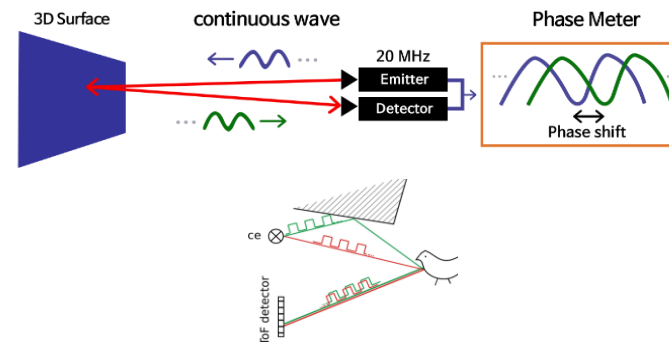
2D/3D simultaneous measurement enables robot' s SLAM and obstacle avoidance at the same time
– **Low power and miniaturization technology**



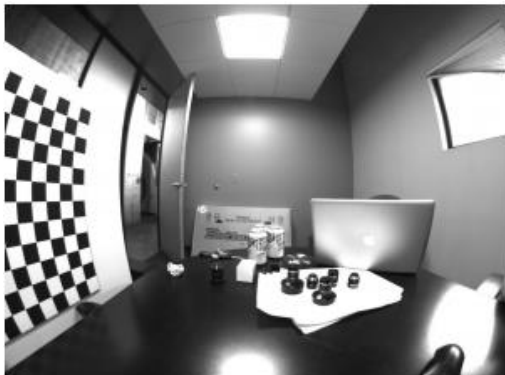
Patent No : 10-2020-0139388

TECHNOLOGY

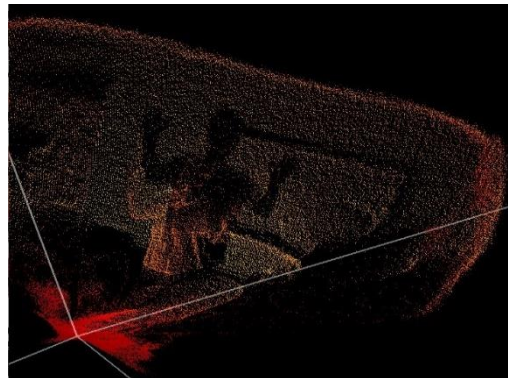
Distortion of LiDAR using light, MPI(Multipath Interference), Ambient Light has environmental problem-solving skills.



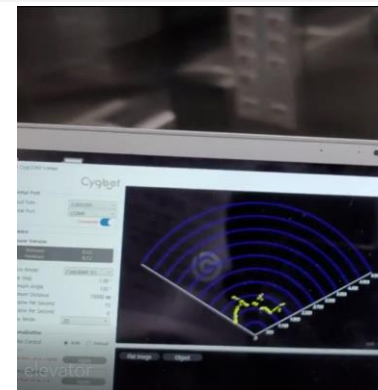
Accurate Point Cloud data through distortion correction, mass-produce Calibration technology.



No patent application for production-related technology



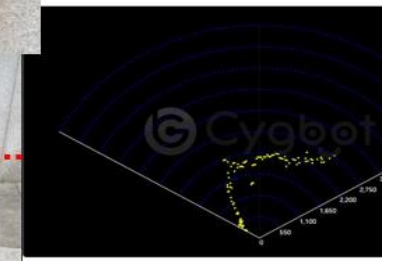
ToF Depth measurement technology reduces metal reflector ghost phenomenon and outdoor recognition technology.



Patent No : 10-2029003

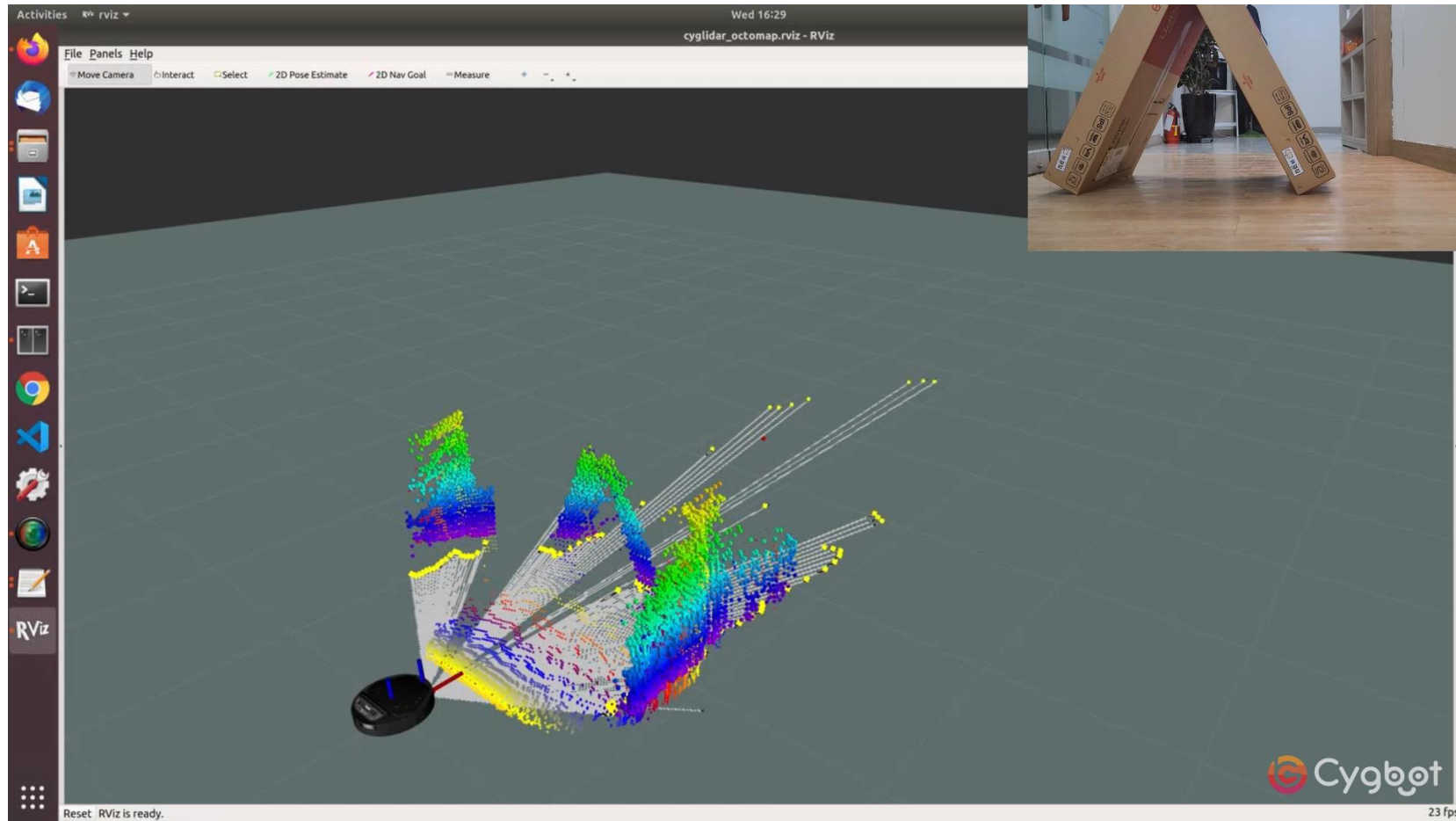


Outdoor environment over 100K Lux.



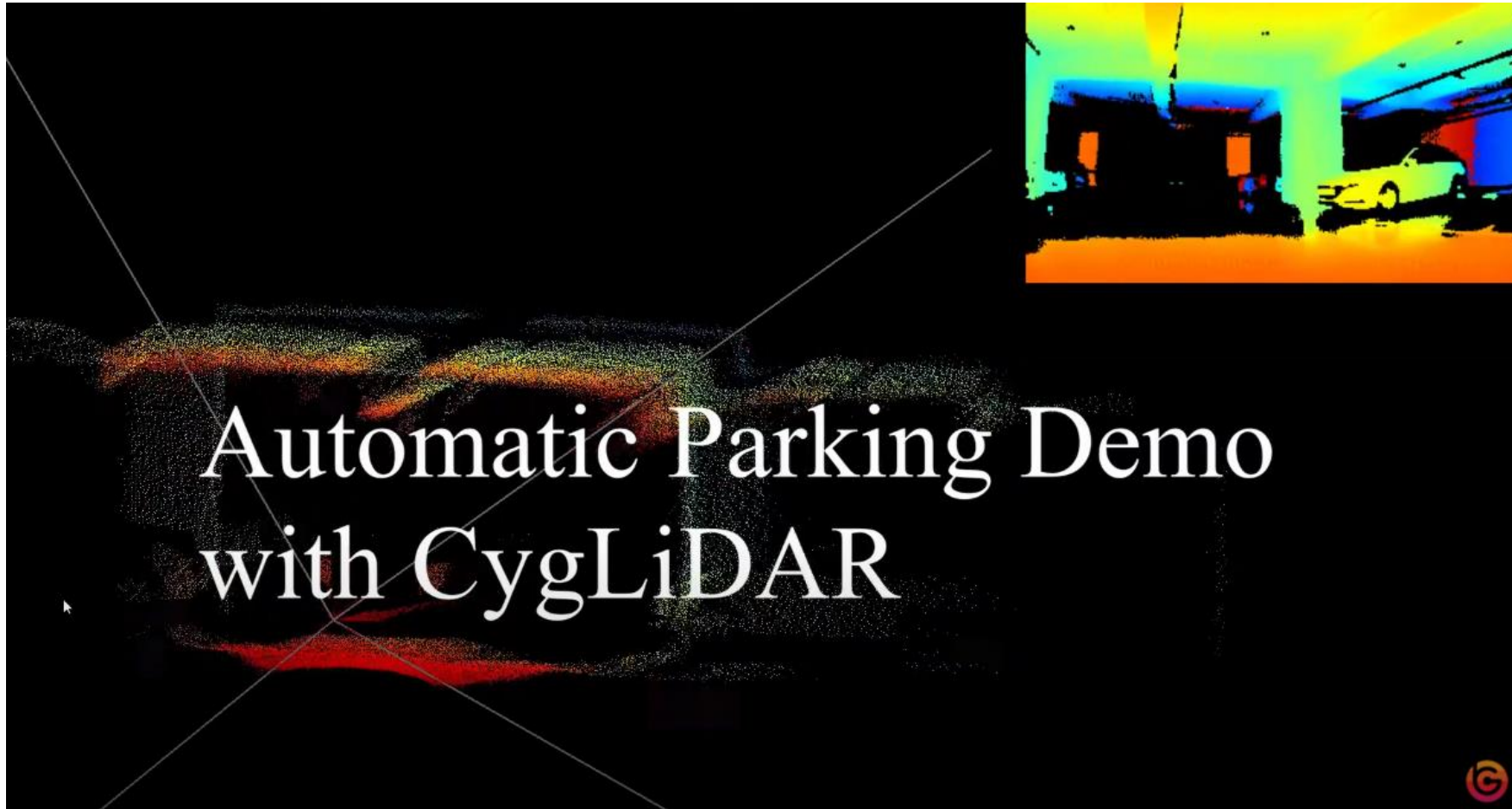
Patent No : 10-2241718

TECHNOLOGY



<https://youtu.be/34n1tF5OtQU>

TECHNOLOGY



<https://youtu.be/XlAYalowCVY>

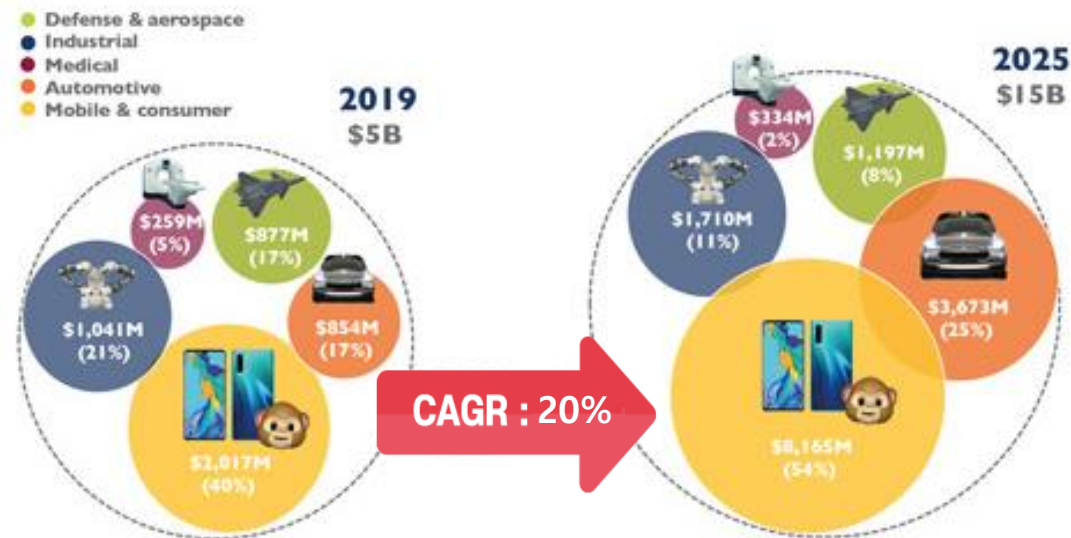
COMPETITOR

CygLiDAR 2D/3D Dual SolidState ToF LiDAR

	MODEL	FOV	RANGE	COST	TYPE
	VELODYNE Velarray H800	H120 V16	0.1M~200M	\$500(At volume)	SOLID STATE
	VALEO NFL	100x80	~10M	\$250(At volume)	SOLID STATE
	SOSLAB ML	H20 x V11.2 H60 x V30 H180 x V45	~200M ~80M ~40M	-	SOLID STATE
	LUMINAR IRIS	H120 V30	~250M	-	SOLID STATE
	CygLiDAR H2	3D : H120 X V80 2D : H120	3D : ~13M 2D : ~25M	\$200(At volume)	SOLID STATE

The growth of The Depth Sensor Market for autonomous driving

2019–2025 3D sensing and imaging marker forecast (in \$M)



\$15 billion (174 trillion won) in 2025.

2D/3D LiDAR for Robot

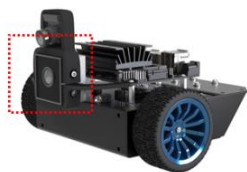
Ultra-small LiDAR for small mobile robots such as robot vacuum and smart toys.



- CygLiDAR D1 (Indoor)
- CygLiDAR D2 (Outdoor)

- 2D/3D LiDAR for robot vacuum
- For mobile robot
- For cleaning robot
- Smart toy sensor
- Gesture recognize

EDUCATION



ROBOT VACUUM



SMART TOY



GESTURE RECOGNIZE



Autonomous Driving near-field LiDAR

Automatic parking system for autonomous vehicles or LiDAR for detecting vehicle risk.



- CygLiDAR H2 (2D/3D)
- CygLiDAR H2A (3D)

- Automatic parking system
- LiDAR for detecting vehicle danger
- Delivery robot



AUTO PARKING



DELIVERY ROBOT





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