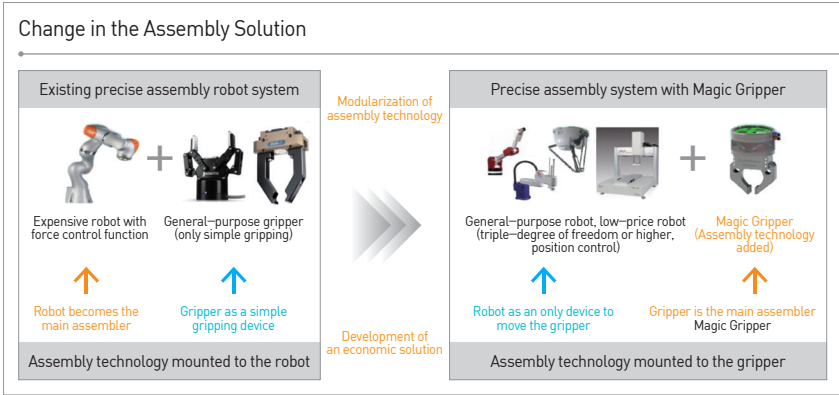


Gripper for Assembly and Assembling Technology Applicable for Wide Use Industrial Robot

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- ⇒ All-in-one magic gripper for precision component assembly and assembly process technology using the gripper
- ⇒ Passive compliance gripper integrating teaching technology, correction technology, and assembly strategy for precision IT product components assembly, assembly robot system and assembly technology
- ⇒ Assembly process analysis and gripping mechanism
- ⇒ Passive compliance gripper for assembly process
- ⇒ Practical assembly strategy for precision component assembly
- ⇒ Vision solution strong against external environment



Client / Market

- Robot manufacturer

Necessity of this Technology

- Existing gripper can only perform grabbing works
- It is not able to apply appropriate stiffness for assembly and calculate the deviation from the target position that it is not suitable for precise assembly.

Technical Differentiation

- Magic gripper enables position control based robot can be used for precise assembly tasks.
- Deviation from the target position can be calculated without force-torque sensor
- Precise assembly is possible as the deviation is reflected in the robot's paths.

DESIRED PARTNERSHIP

Technology Transfer

Licensing

Joint Research

Other

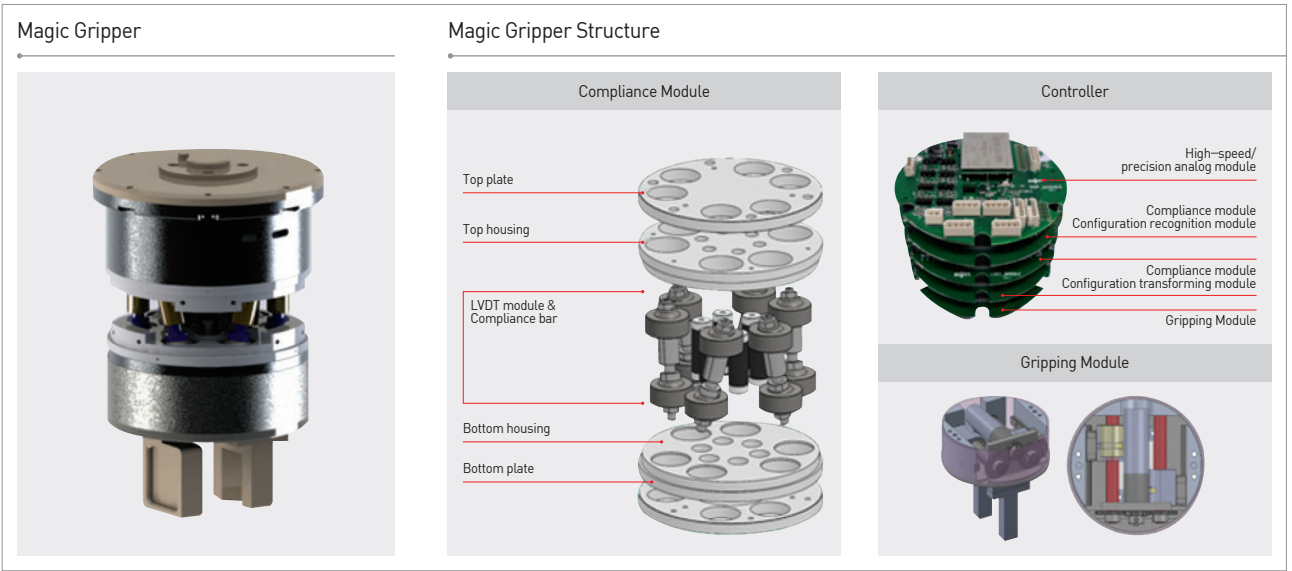


TECHNOLOGY READINESS LEVEL [TRL]



Excellence of Technology

- Can be applied in various fields including IT component assembly for mobile phone and smart pads, assembly of small precision components like connector, and precision machine component assembly
- Performance test completed



Current Intellectual Property Right Status

PATENT

- Assembly Teaching Method Using Variable Passive Compliance Gripper (KR1688866)
- Passive Compliance Gripper with Displacement Measurement Function and Variable Passive Compliance Gripper (KR1688867)
- Variable Passive Compliance Gripper (KR1682358)
- Assembly Control Method Using Passive Compliance Gripper with Displacement Measurement Function (KR1684894)

KNOW-HOW

- Magic Gripper realization for using existing position control-based robot for assembly work
- Gripping module, compliance module and controller integration technology
- Precision component assembly technology