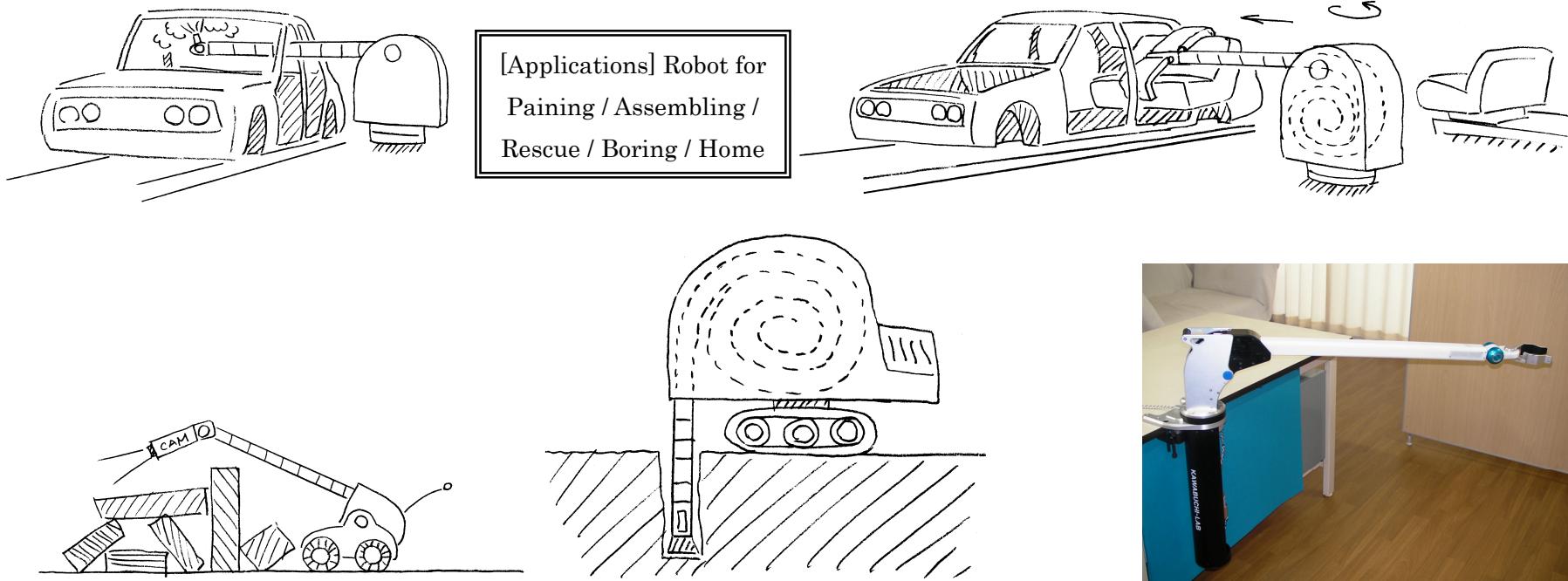


Linear-Motion Telescopic Mechanism and Robot Arm

☆★☆★☆★☆ Narrow and Long Range / Compact Folding into body ☆★☆★☆★☆

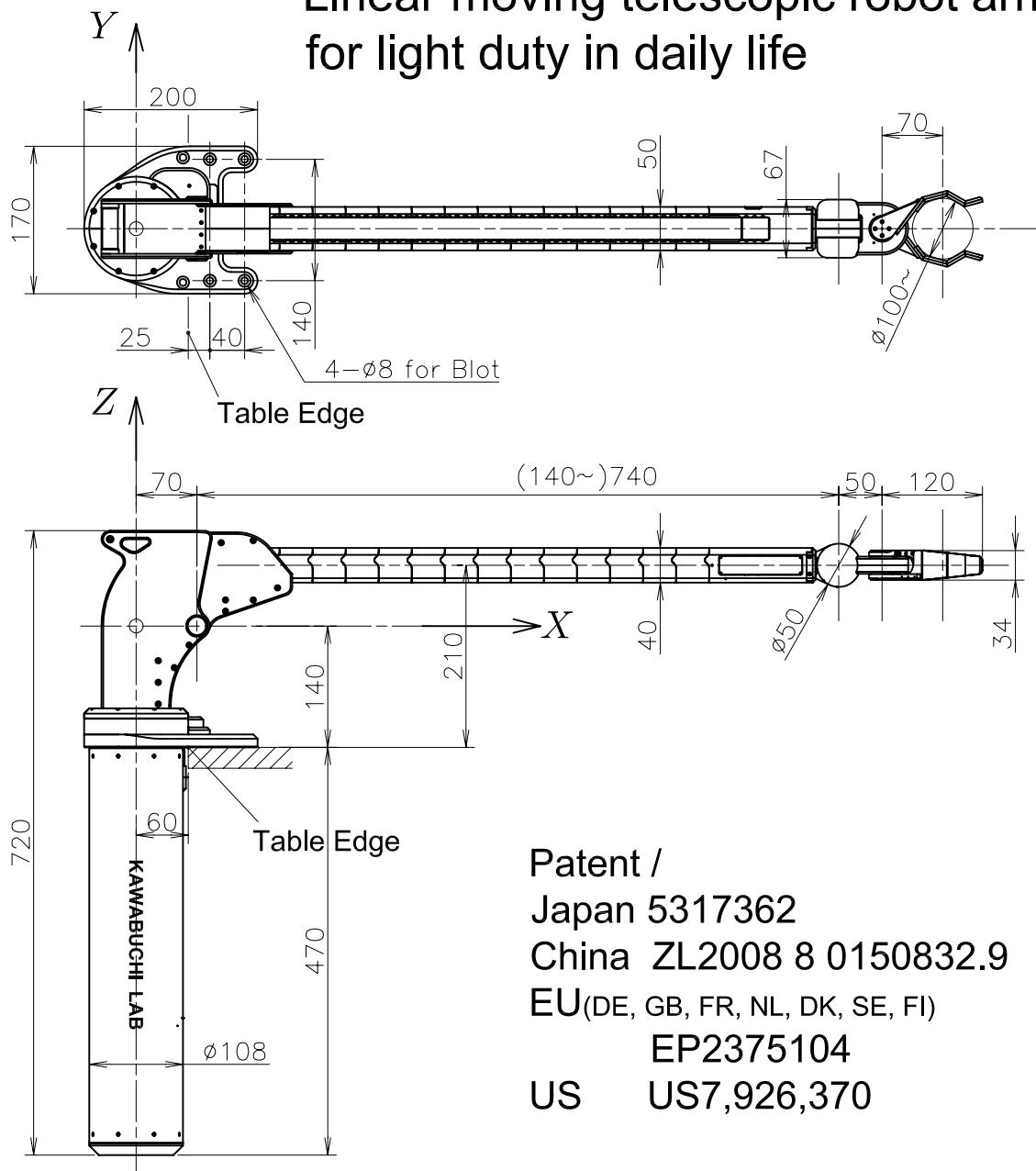


[Offers] Patent License / Elements Sales / Developing special robots or a part of them

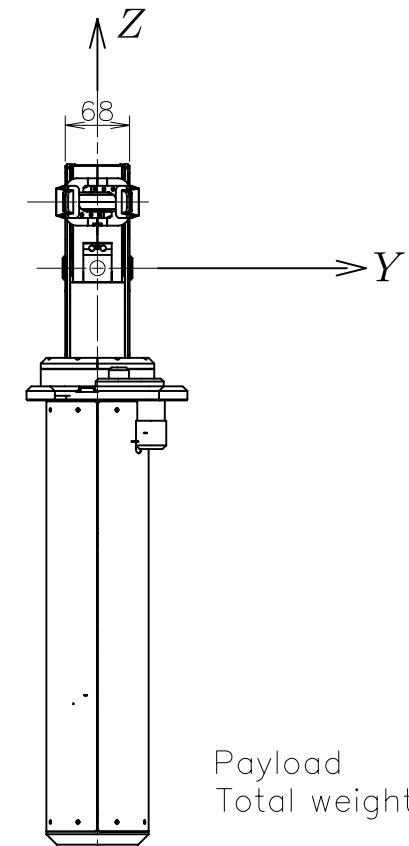
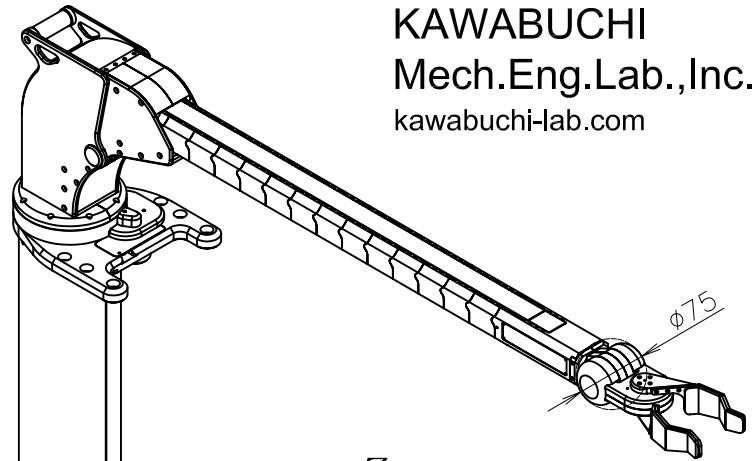
[Note] Although our company has many past works, CEO PhD Kawabuchi is an only engineer in it. So its capacity is a small.

Linear moving telescopic robot arm for light duty in daily life

KAWABUCHI
Mech.Eng.Lab.,Inc.
kawabuchi-lab.com

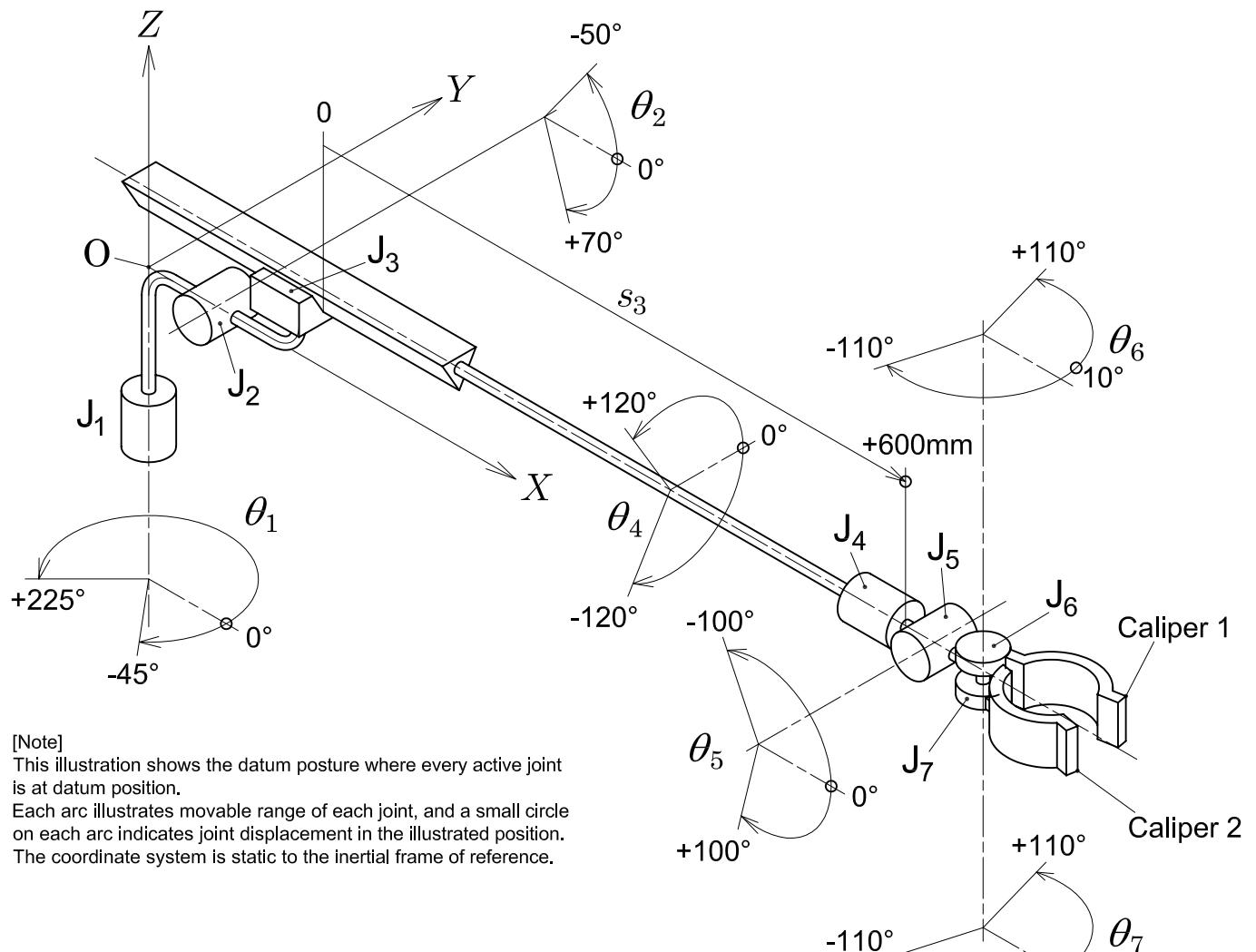


Patent /
Japan 5317362
China ZL2008 8 0150832.9
EU(DE, GB, FR, NL, DK, SE, FI)
EP2375104
US US7,926,370

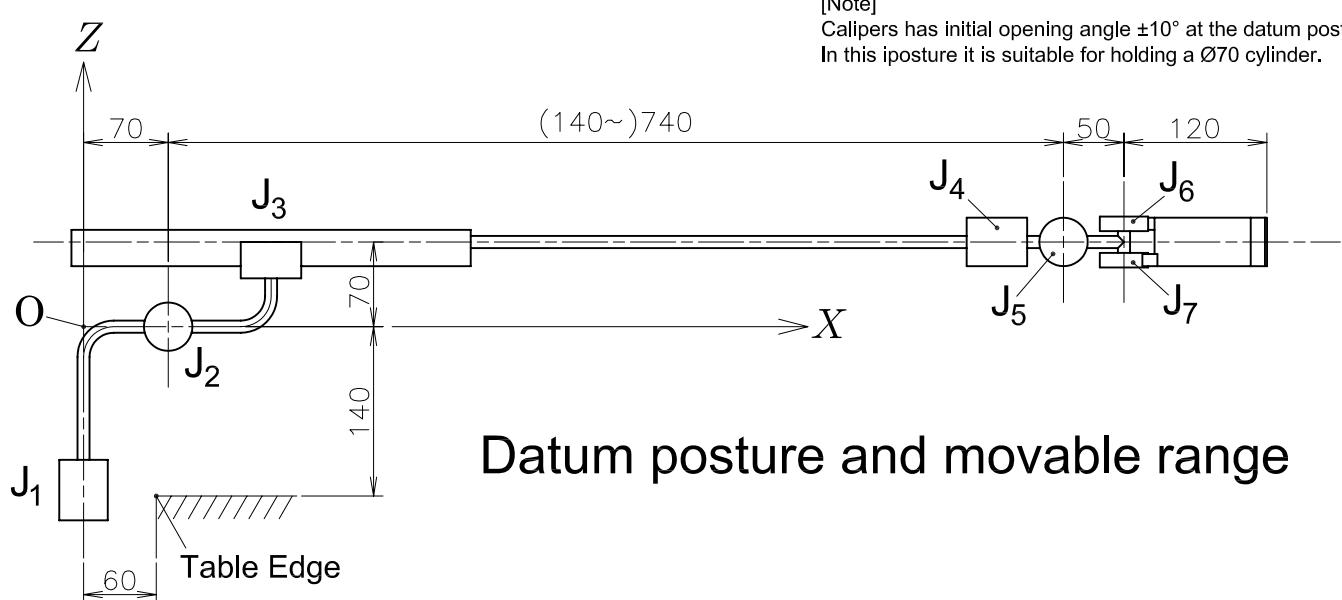


Payload : 0.5kg
Total weight : 6.0kg

Designed by	川渕一郎	Scale	1/8	Title	Overall Picture
TEXART		Date	6/10/2014	No.	LA_01-A01



[Note]
Calipers has initial opening angle $\pm 10^\circ$ at the datum posture.
In this posture it is suitable for holding a Ø70 cylinder.

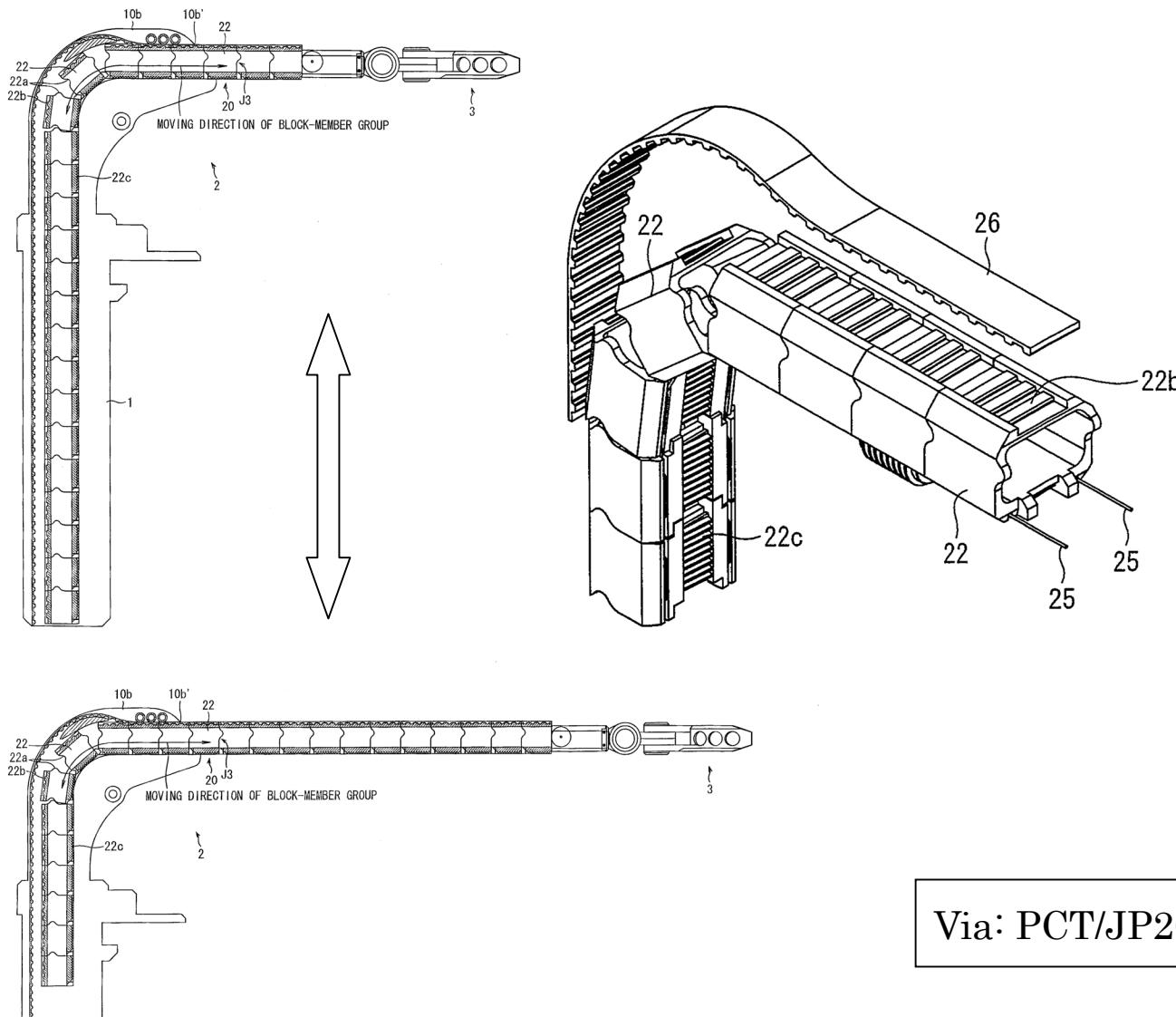


Datum posture and movable range

Designed by	川渕一郎 <i>TEXART</i>	Scale	-/-	Title	Movable Range
		Date	10/6/2014	No.	LA_01-F01

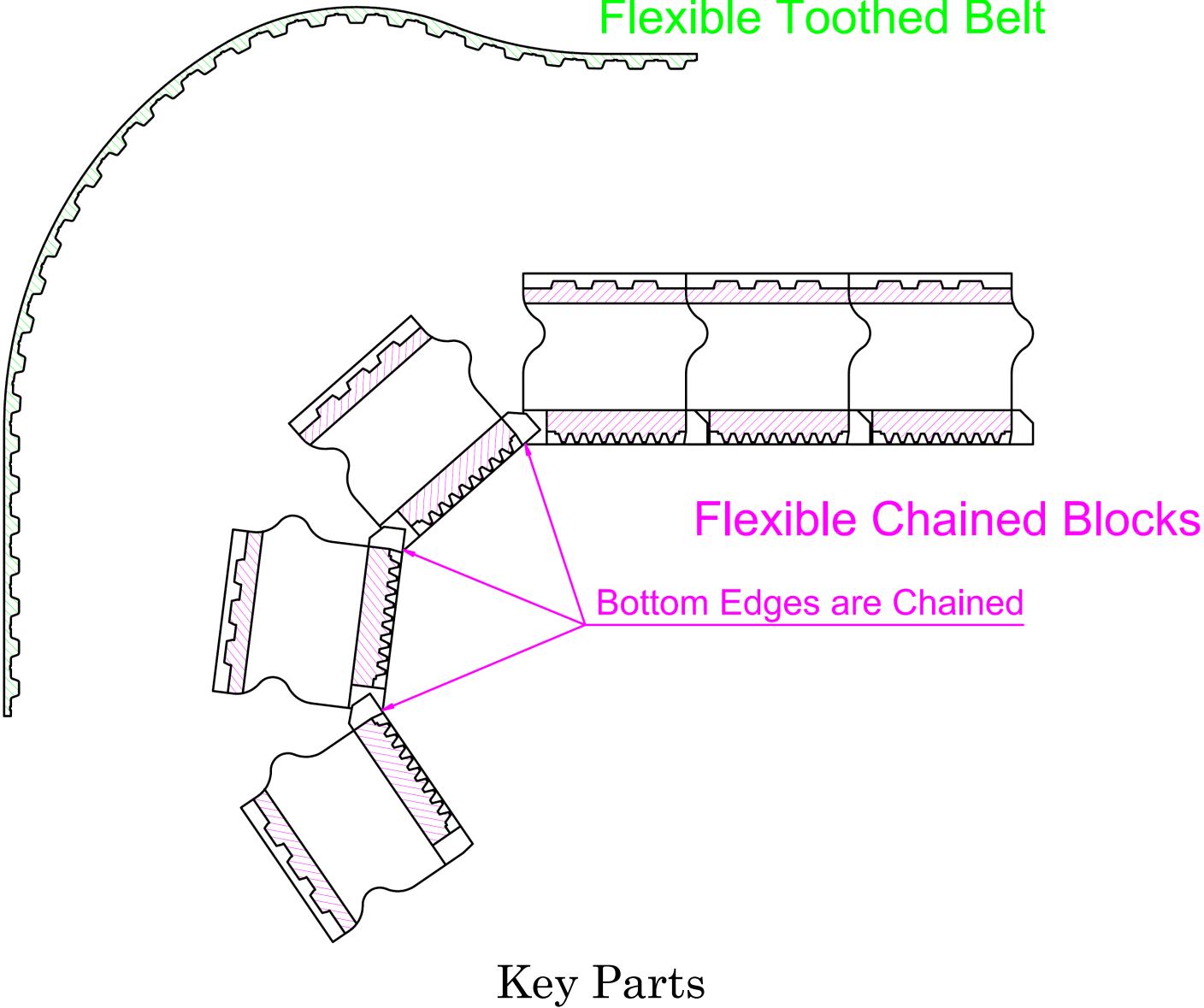
Principle Mechanism of the Linear-Motion Telescopic Mechanism

①

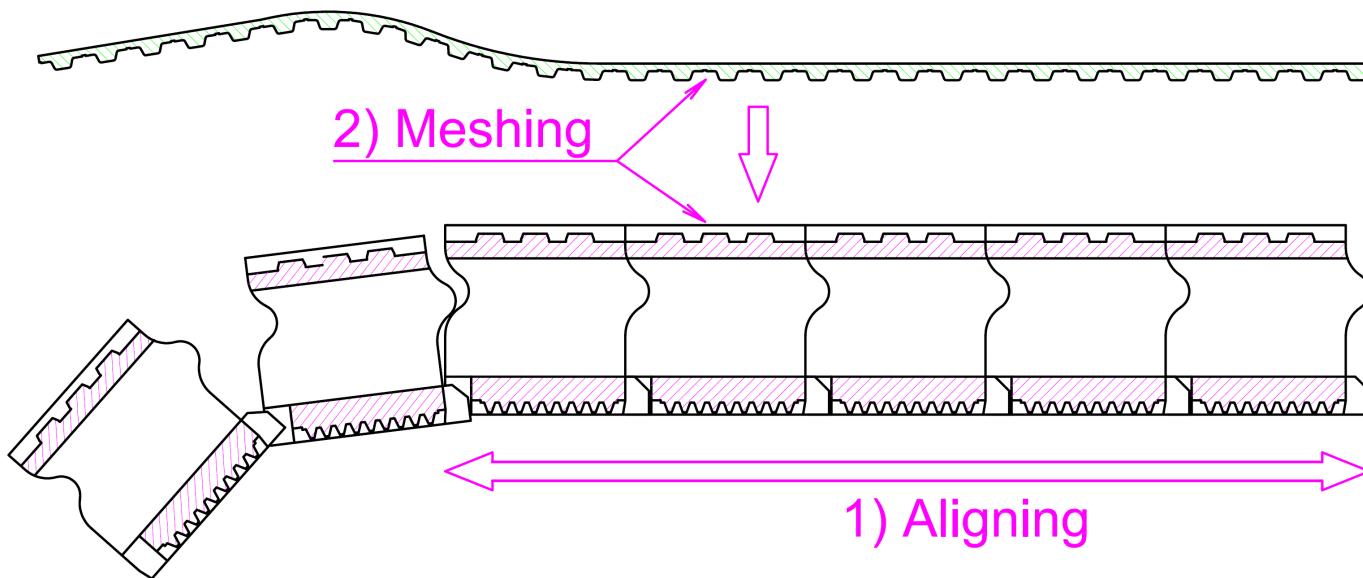


Via: PCT/JP2009/006973

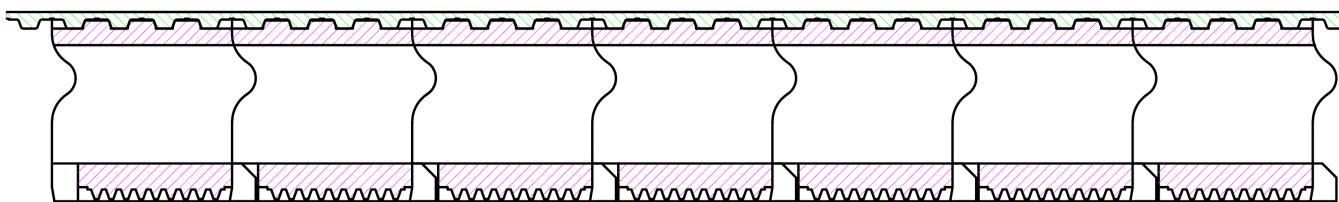
②



③

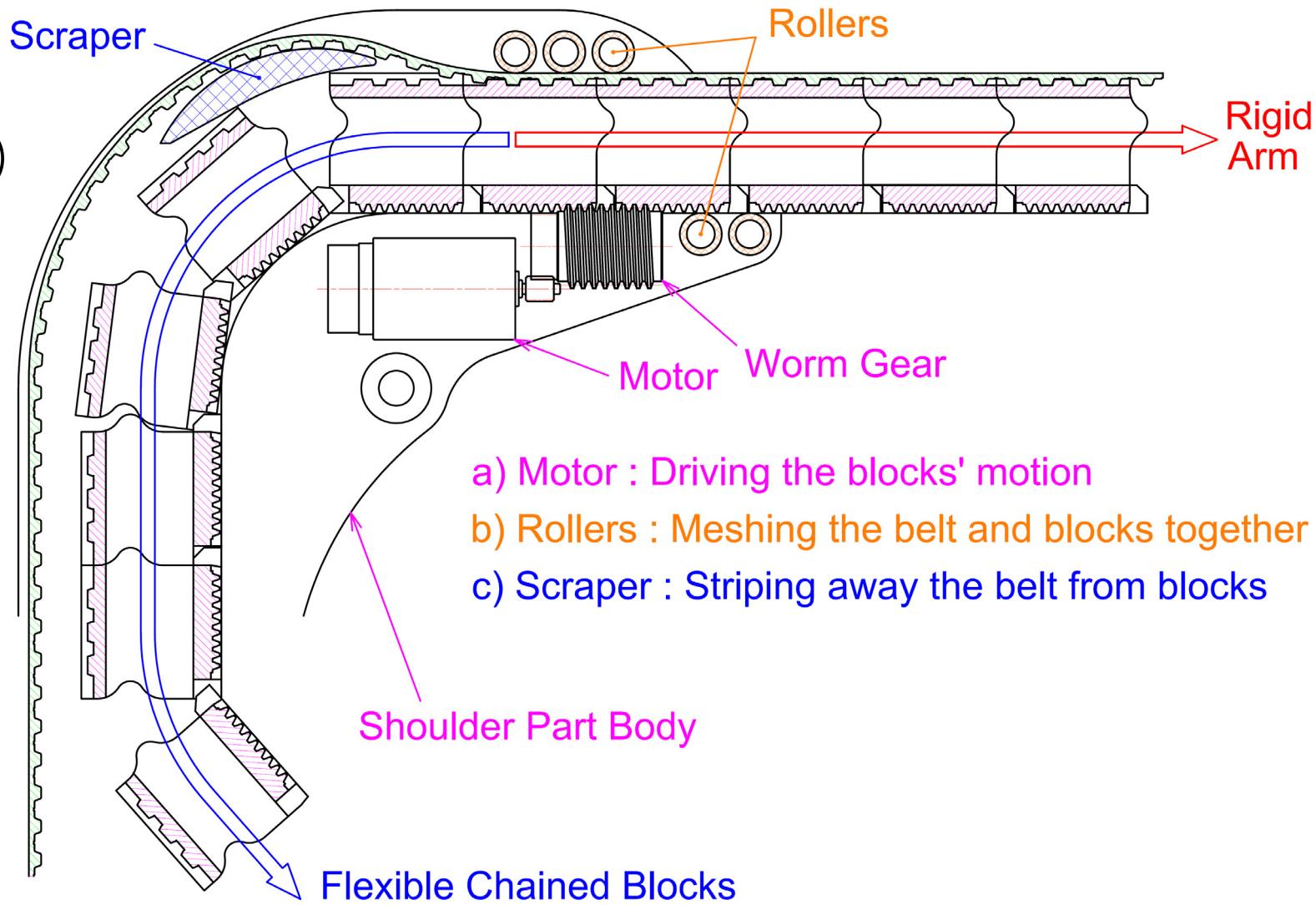


3) Get Rigid Bar



3 Steps to make a Rigid Bar

④



Driving Mechanism

Work Examples

The main object of our business is to provide order-made experimental equipments, machines and robots for universities and laboratories.

Many of the Japanese engineers have excellent ability and technique to create, design and manufacture complicated machines, thanks to their exquisite sensibility, awareness of details and dexterity of the hands.

So, we have been dreamed of gathering these human resources; craftsmanship to promote design power to create tomorrow machines, and then starting to build a foundation where they can concentrate their hard works.

We hope our company would help your study and development, and hopefully you could help us by doing business together.

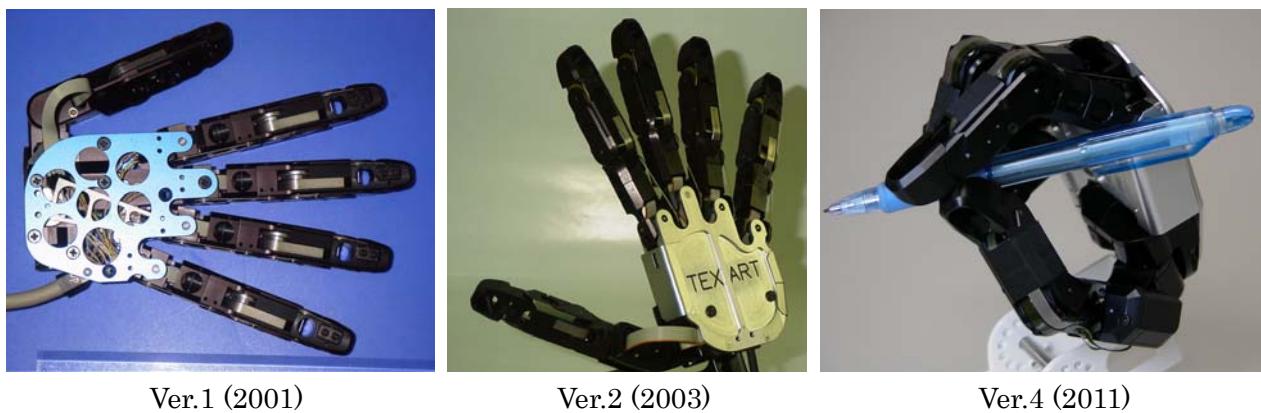


Fig.1 Humanoid universal hands



Fig.2 Pneumatic humanoid arms

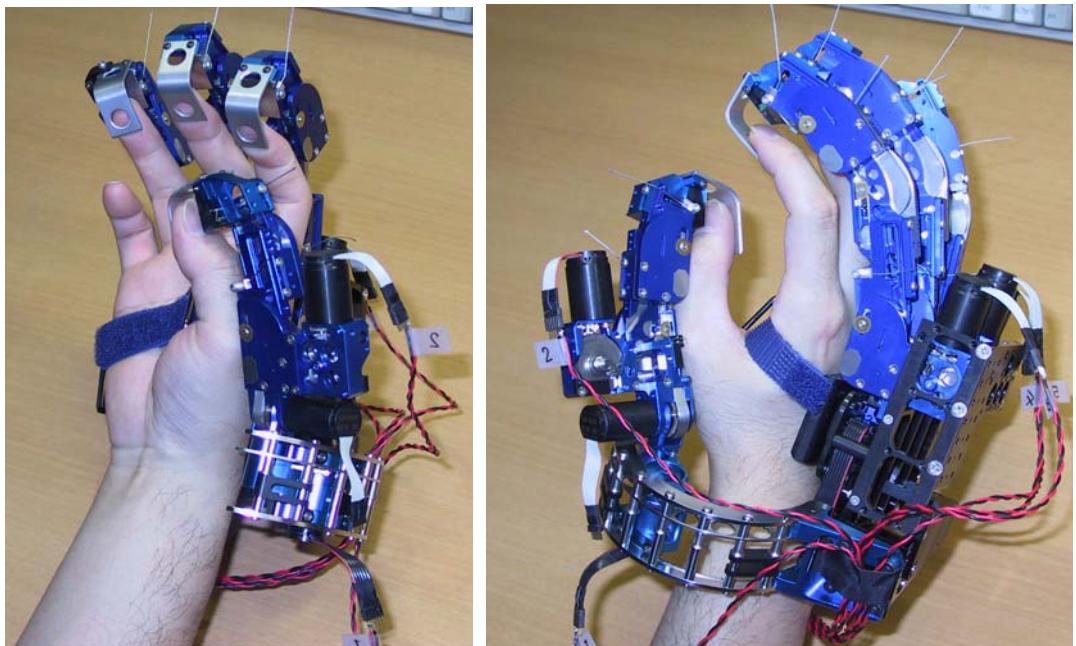


Fig.3 Exoskeleton master hand (2003)

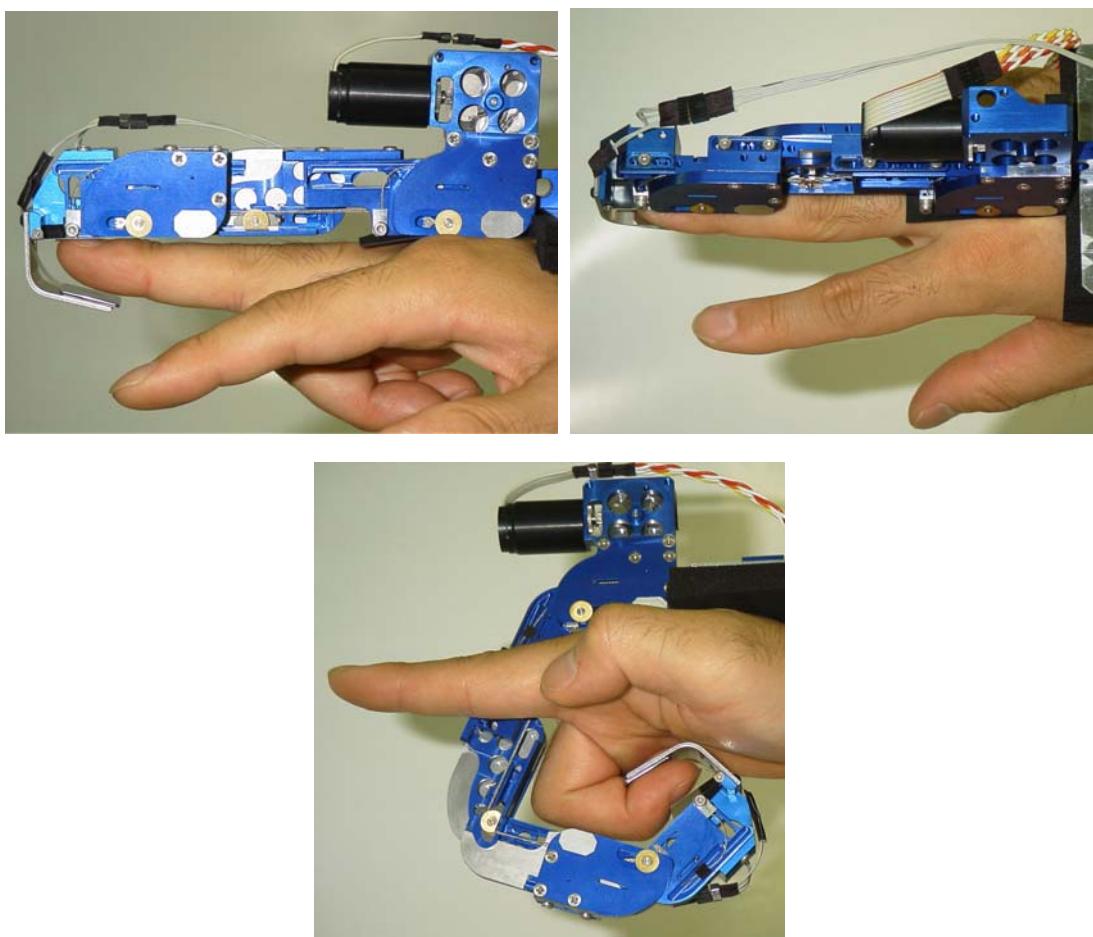


Fig.4 Master finger mechanism (2003)



Fig.5 Master arm for TELESAR II : master-slave system (Expo 2005)



Fig.6 Humanoid robot for TELESAR V : master-slave system (Int. Robot Ex. 2011)

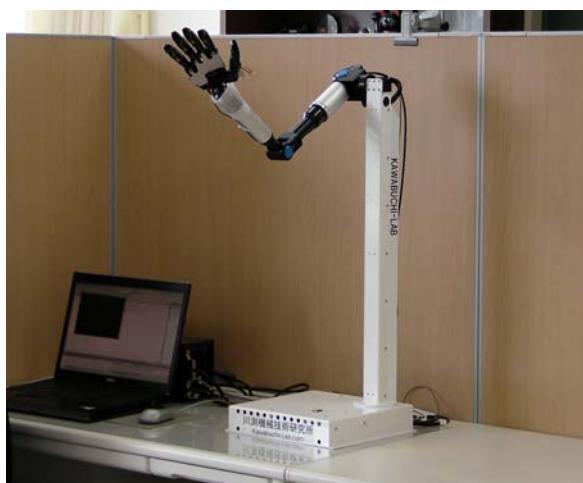


Fig.7 Humanoid arm stand (2010)

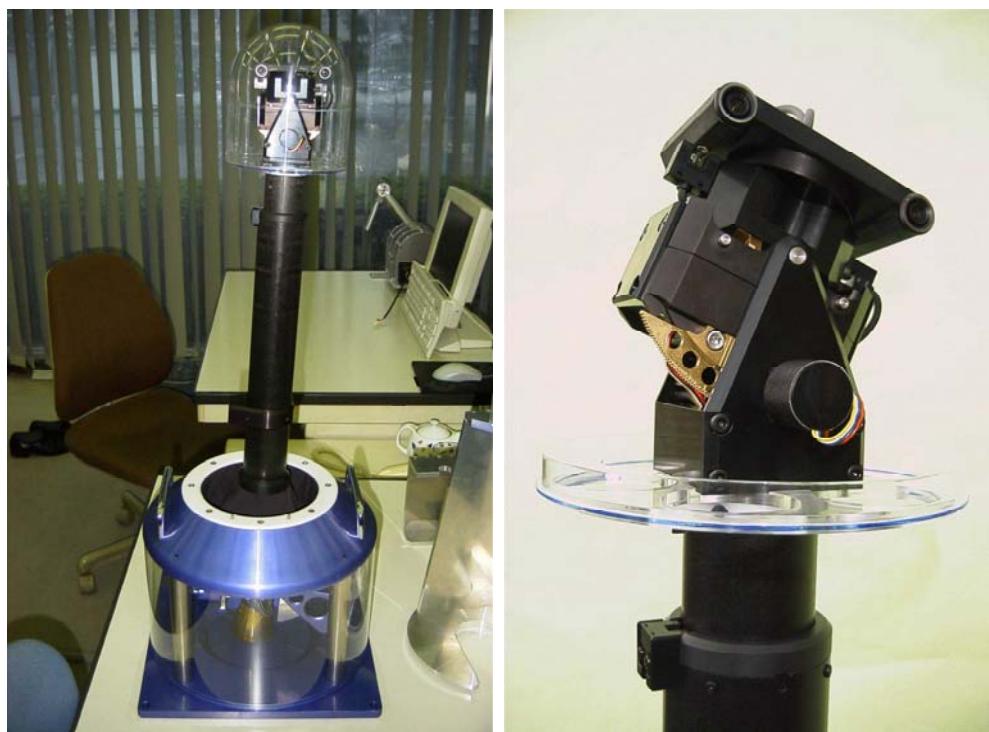


Fig.8 Torso style robot camera (1999)

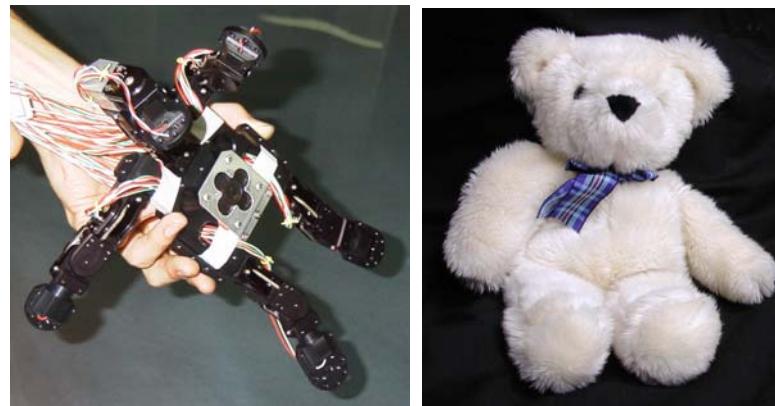


Fig.9 Robot skeleton in the RobotPHONE (Siggraph 2001)



Ver.3 (Siggraph 2002)

Ver.4 (2004)

Ver.5 (2005)

Fig.10 The TWISTERs (Telexistence Wide-angle Immersive STEReoscope)

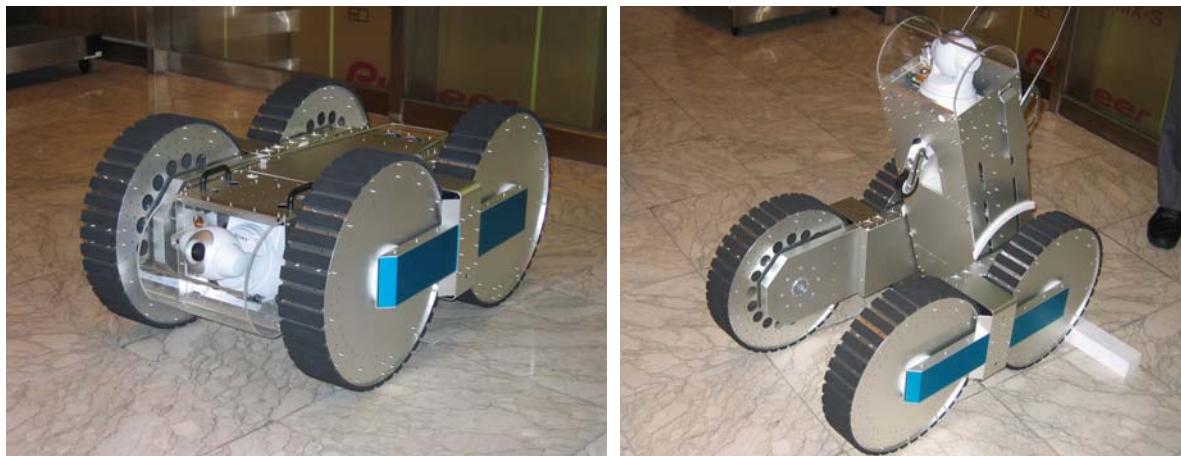


Fig.11 Wheeled rescue robot (2004)

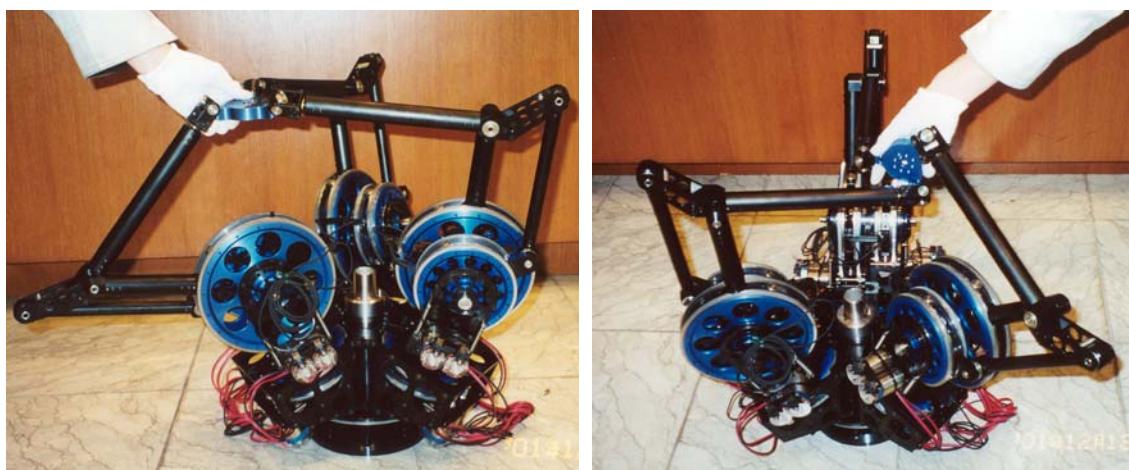


Fig.12 6 D.O.F. parallel manipulator (2001)

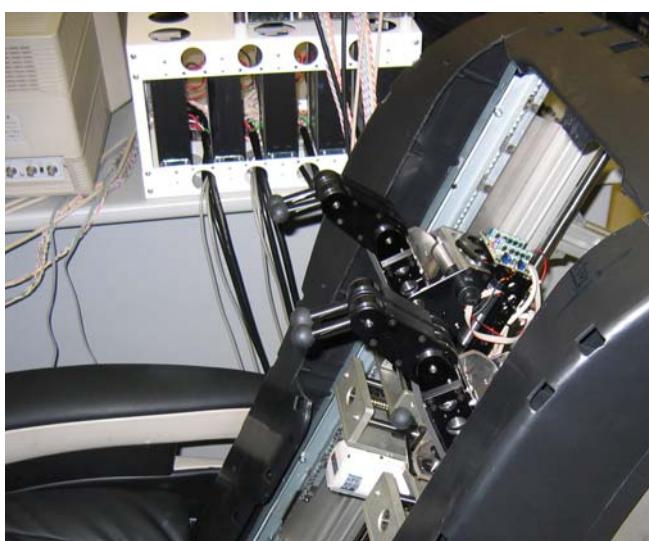


Fig.13 Massage chair robot (2004)



Fig.14 Batting robot (Expo 2005)



Fig.15 4 D.O.F. ϕ 10 Robotic Forceps Tip (2007)

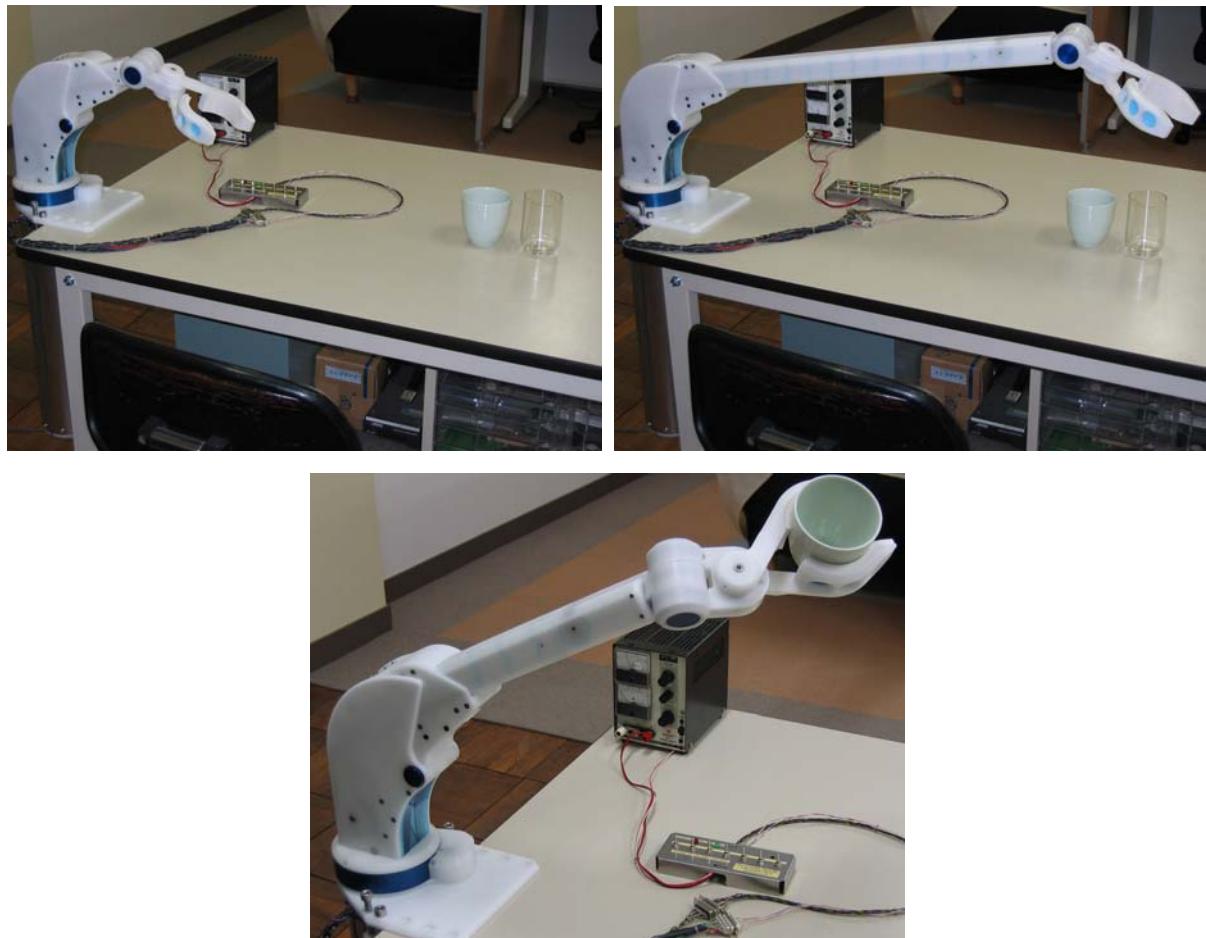


Fig.16 Personal assistant robot arm w/linear expandable stem (2007)

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