

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201931049884 A

(19) INDIA

(22) Date of filing of Application :04/12/2019

(43) Publication Date : 11/06/2021

(54) Title of the invention : COMMUNICATION WITH DYNAMIC ARM MOTION USING FUZZY CONTROL ALGORITHM FOR HOUSEKEEPING.

(51) International classification	:H04L0029080000, H03K0003356000, H04W0012040000, A61B0017000000, A01N0063040000	(71)Name of Applicant : 1)GURU NANAK INSTITUTE OF TECHNOLOGY Address of Applicant :157/F, NILGUNJ ROAD,PANIHATI, KOLKATA-700114,WEST BENGAL,INDIA West Bengal India
(31) Priority Document No	:NA	(72)Name of Inventor : 1)MOLOY DHAR
(32) Priority Date	:NA	2)SAYAN ROY CHAUDHURI
(33) Name of priority country	:NA	3)SUPARNA BISWAS
(86) International Application No	:NA	4)IPSITA SAHA
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Significant work was made in the direction of natural and intelligent interface development through Human Robot Interaction with Dynamic Arm. Various modes of information, such as video, audio have been proposed either separately or in combination. Household intelligent Dynamic Arm is mainly composed of five parts: the sensor system, motion system, control system, cleaning system and the shifting system. Motion system determines the robot movement space. Dynamic Arm driven design is two-wheel-drive, which can be divided into front and rear-wheel drive. The advantage of front-wheel drive is that navigating performance is improved. While rear wheel is turning wheel, driving direction is easy to control and not liable to immoderate navigating, so that navigating safety is improved. For avoid obstacles in cleaning route, the Dynamic Arm must use the sensing system to real-time monitor the position, status, movement environment, to ensure that the Dynamic Arm is in a normal operating state. The sensors systems of the Dynamic Arm are divided into two parts: namely internal sensors and external sensors. Sensors can be used to calculate the Dynamic Arm's movement speed, acceleration, and its location, etc.

No. of Pages : 7 No. of Claims : 5