

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311085907 A

(19) INDIA

(22) Date of filing of Application :15/12/2023

(43) Publication Date : 19/01/2024

(54) Title of the invention : AUTOMATED BOAT BERTHING ASSISTIVE DEVICE

(51) International classification :B63B0021540000, B63B0021040000, B65G0023080000, B63B0021000000, G03F0007300000

(86) International Application No :NA
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

(71)Name of Applicant :
1)Noida Institute of Engineering and Technology, Greater Noida

Address of Applicant :Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

Name of Applicant : NA
Address of Applicant : NA

(72)Name of Inventor :

1)Ashutosh Kumar Singh
Address of Applicant :Department of Electronics & Communication Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

2)Shikha Singh
Address of Applicant :Department of Electronics & Communication Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

3)Sanjay Kumar
Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

4)Pulkit Srivastava
Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

(57) Abstract :

The present invention relates to an automated boat berthing assistive device, comprising a frame having a plate developed to be installed on side portion of a boat, a communication module installed with an inbuilt microcontroller for establishing a wireless connection between microcontroller and user's computing unit accessed by user for activating/de-activating device, an artificial intelligence-based imaging unit 2 installed on plate for capturing and determining location of a mooring in proximity to frame, a telescopically operated rod 3 attached on plate via a motorized ball and socket joint 4 for extending/retracting to position rod 3 in proximity to mooring, a U-shaped member 5 installed on free end of rod 3 for engaging/disengaging a first and second ends of a link 6 attached on frame, a motorized roller 7 coiled with a rope 8 attached on plate for allowing berthing of boat at mooring.

No. of Pages : 15 No. of Claims : 4