

(54) Title of the invention : DESIGN AND FABRICATION OF COCONUT TREE CLIMBING ROBOT

<p>(51) International classification :G06Q0010060000, A01M0007000000, G05D0001020000, A01G0013000000, A63B0027000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. P. K. SRIVIDHYA</b> Address of Applicant :PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, PERIYAR MANIAMMAI INSTITUTE OF SCIENCE &amp; TECHNOLOGY, VALLAM, THANJAVUR, TAMIL NADU, INDIA 613403. Tamil Nadu India</p> <p><b>2)Mr. RAKESH.R</b> <b>3)Mr.U.SARAVANAKUMAR</b> <b>4)Mr. N. SHIVAKUMAR</b> <b>5)Mr. P. ILANGO VAN</b> <b>6)Mr. KARTHIC SUBRAMANIYAN.I</b> <b>7)Mr. S. SATHISH RAKIN</b> <b>8)Mr. AJAIKUMAR.G</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. P. K. SRIVIDHYA</b> <b>2)Mr. RAKESH.R</b> <b>3)Mr.U.SARAVANAKUMAR</b> <b>4)Mr. N. SHIVAKUMAR</b> <b>5)Mr. P. ILANGO VAN</b> <b>6)Mr. KARTHIC SUBRAMANIYAN.I</b> <b>7)Mr. S. SATHISH RAKIN</b> <b>8)Mr. AJAIKUMAR.G</b></p>
--	---

## (57) Abstract :

The greatest challenge of the in the coconut farming is the scarcity in availability of human workers for climbing the trees for its regular maintenance and plugging of ripened coconut from the trees. The regular maintenance is required periodically which includes spraying pesticides, insecticides, plugging unripe infected coconut etc. Though it's a part of farming but human life is under risk while climbing the tall trees and year to year there is lots of accident case registered due to the mishappening while climbing the tree. This coconut farming is very familiar in the delta region of Tamilnadu, India and this project focus on supporting these farm owners by providing a technology based solution replacing the tradition method of relying on human labors. Hence this autonomous tree climbing mechanism can be used for farm maintenance by considering-the safety factor of human life. The objectives are given below: â€¢ To replace the traditional human climbing mechanism with autonomous robot with innovative gripping and climbing mechanism. â€¢ To design and fabricate an cost effective module for climbing up and down the tree.

No. of Pages : 17 No. of Claims : 6