



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic>)

Patent Search

Invention Title	AUTOMATIC BRAKE FAILURE DETECTION SYSTEM WITH AUXILIARY BRAKING SYSTEM
Publication Number	06/2020
Publication Date	07/02/2020
Publication Type	INA
Application Number	201821029110
Application Filing Date	02/08/2018
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	MECHANICAL ENGINEERING
Classification (IPC)	B60T0017220000,B60T0007220000,A61G0005100000,B60T0007140000,B66B0029000000

Inventor

Name	Address	Country	N
Prof. Tharesk K. Gawande	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Prof. Ms. Pallavi R. Chaudhari	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Samiksha G. Ingle	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Shweta V. Niradkar	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Komal A. Kinge	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Shweta G. Mopari	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Pooja R. Jamthe	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Dhanshree R. Gorle	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir

Applicant

Name	Address	Country	N
Prof. Tharesk K. Gawande	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Prof. Ms. Pallavi R. Chaudhari	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Samiksha G. Ingle	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Shweta V. Niradkar	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Komal A. Kinge	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Shweta G. Mopari	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Pooja R. Jamthe	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir
Ms. Dhanshree R. Gorle	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, Maharashtra	India	Ir

Abstract:

The present invention relates to automatic brake failure detection system with auxiliary braking system in emergency case. The aim is to improve the safety parameter to brakes. In this system if brake failure occurs then the buzzer gives the indication to the driver in the form of sound and simultaneously alternative braking system working with the help of microcontroller unit and apply the secondary brakes. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the braking system, Figure 2 of sheet 1 showing the secondary braking system and Figure 3 of sheet 2 showing the connection between primary and secondary braking systems.

Complete Specification

Claims:We claim:-

1. Automatic brake failure detection system with auxiliary braking system comprises of wheel, pedestal bearing, disc brake system, MS round bar, roller type unit microcontroller unit plate, solenoid valve, compressor, double acting pneumatic cylinder and dowel pin
2. A system as claimed in claim 1 consists of two braking systems wherein disc brake is a primary braking system and drum brake is secondary braking system, w drum brake system come into application after failure of disc brake system.
3. Accordingly as claimed in claim 1 characterized in that; on frame, two MS round bar are mounted as per the size of wheel; MS bar 1 for wheel installation and M for pedal mounting, the working wheel mounted on MS bar 1 which is supported by pedestal bearing on both the ends and disc brake system is also mounted on s shaft; pedal and lever arrangement is provided on MS bar 2 for pedal operation and in order to come in engaged and disengaged position with help of dowel pin af detection of failure of brake; the roller type unit switch is also mounted on MS bar 2 used to count the number of pedal applied for braking, said unit switch is conn microcontroller unit plate; Solenoid valve is connected to microcontroller unit and used for allowing the compressed air to pass towards double acting cylinder thrc polyurethane tube after detection of brake failure and forward and backward moment of piston; polyurethane tube is configured for connecting solenoid ports to ports: double acting pneumatic cylinder is used for braking purposed which is operated through compressed air from compressor

[View Application Status](#)



Terms & conditions (<http://ipindia.gov.in/terms-conditions.htm>) Privacy Policy (<http://ipindia.gov.in/privacy-policy.htm>)

Copyright (<http://ipindia.gov.in/copyright.htm>) Hyperlinking Policy (<http://ipindia.gov.in/hyperlinking-policy.htm>)

Accessibility (<http://ipindia.gov.in/accessibility.htm>) Archive (<http://ipindia.gov.in/archive.htm>) Contact Us (<http://ipindia.gov.in/contact-us.htm>)

Help (<http://ipindia.gov.in/help.htm>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019