

(54) Title of the invention : METHOD AND SYSTEM FOR IMPLEMENTING SMART AUTOMOTIVE ELECTRONICS FOR SENSING DATA FROM VEHICLES

<p>(51) International classification :G06F0009440100, H04L0029080000, H04L0012400000, H04W0008240000, H04N0021442000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)R.V.R. & J.C. COLLEGE OF ENGINEERING Address of Applicant :R.V.R. & J.C. COLLEGE OF ENGINEERING, GUNTUR-522019, ANDHRA PRADESH, INDIA ----- Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)DR. GHANTA SUDHAVANI (PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: gsudhavani@rvrc.ac.in ----- 2)DR. J. RAVINDRANADH (PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: jravindranadh@rvrc.ac.in ----- 3)DR. SURESH KUMAR PITTALA (ASSOCIATE PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: psureshkumar@rvrc.ac.in ----- 4)DR X. ASCAR DAVIX (ASSOCIATE PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH ----- 5)P. SAILAJA (ASSISTANT PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: ascardavix@rvrc.ac.in ----- 6)P. SIVA PRASAD (ASSISTANT PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: psivaprasad@rvrc.ac.in ----- 7)MURALI KRISHNA ATMAKURI (ASSISTANT PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: amuralikrishna@rvrc.ac.in ----- 8)T. SUNEETHA (ASSISTANT PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: tsuneetha@rvrc.ac.in ----- 9)N. SUDHEER KUMAR (ASSISTANT PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: nsudheerkumar@rvrc.ac.in ----- 10)MAKKAPATI HIMAJA (ASSISTANT PROFESSOR) Address of Applicant :DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS) CHANDHRAMOULIPURAM, CHOWDAVARAM, GUNTUR – 522019, ANDHRA PRADESH Email: makkapatihimaja@rvrc.ac.in -----</p>
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(57) Abstract :
ABSTRACT METHOD AND SYSTEM FOR IMPLEMENTING SMART AUTOMOTIVE ELECTRONICS FOR SENSING DATA FROM VEHICLES The present invention provides an approach for implementing smart automotive electronics for sensing data from vehicles. The method comprises implementing open systems and their interfaces for the Electronics in motor vehicles based Controller Area Network stack in each of a plurality of booting phases of the ECU, and creating a data structure that stores information pertaining to each of runtime information, state information, message buffers, and a diagnostic session state of the automobile, wherein the data structure is stored in the memory mapped region of the ECU. The method executes one or more instructions of the OSEK based CAN stack for booting the automotive electronics in the ECU and sensing the data in real time from the vehicles based on the information stored in the data structure.