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(51) International classification	:H02H3/06, H01H71/72, G05B23/02, G01R31/327	(71)**Name of Applicant :** **1)Punithavathy E** Address of Applicant :Assistant Professor, Department of Computer Applications, Madras Christian College, Chennai ----------- ----------- **2)Dr.N.Priya** **Name of Applicant : NA** **Address of Applicant : NA** (72)**Name of Inventor :** **1)Punithavathy E** Address of Applicant :Assistant Professor, Department of Computer Applications, Madras Christian College, Chennai ----------- ----------- **2)Dr.N.Priya** Address of Applicant :Associate Professor, Research Department of Computer Science, S.D.N.B Vaishnav College for Women, Chennai ----------- -----------
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(57) Abstract :
The proposed invention, the Auto Retry Circuit Breaker (ARCB), enhances resilience and performance in cloud-based distributed systems and microservice architectures. By automating the configuration of circuit breakers and incorporating an intelligent auto-retry mechanism, the ARCB dynamically adjusts its behavior based on real-time performance data. This eliminates manual parameter settings, reduces downtime, and optimizes resource utilization. The ARCB continuously monitors service performance, adjusts circuit breaker parameters, and retries requests intelligently to ensure rapid recovery from transient failures. It aligns with modern DevOps practices, supports hybrid and multi-cloud environments, and integrates with existing monitoring tools. The ARCB's adaptive resilience mechanisms enhance system reliability, support service level agreements, and provide valuable insights into service health, making it a critical innovation for robust cloud applications.

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