

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511043178 A

(19) INDIA

(22) Date of filing of Application :05/05/2025

(43) Publication Date : 23/05/2025

(54) Title of the invention : A LATENCY-AWARE LOAD BALANCING PROTOCOL FOR REAL-TIME STREAMING APPLICATIONS

(51) International classification :A63F0013355000, G06F0009500000, H04L0043085200, H04L0065800000, H04N0021240000

(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 & TECHNOLOGY**

Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)SURYA PRAKASH SHARMA**

Address of Applicant :Department of Computer Science & Engineering, Noida Institute of Engineering & Technology, Greater Noida. Greater Noida -----

(57) Abstract :

The present invention discloses a latency-aware load balancing protocol featuring a controller (52) with an integrated latency monitoring module (54) and server network (56n). The protocol dynamically assigns streaming requests based on real-time latency feedback to reduce buffering and enhance quality. It supports seamless rerouting and scalable deployment with minimal overhead. This system is applicable to live video streaming, cloud gaming, and real-time conferencing applications requiring consistent low-latency performance.

No. of Pages : 14 No. of Claims : 5