(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/10/2023

(21) Application No.202311069106 A

(43) Publication Date : 22/12/2023

(54) Title of the invention : METHOD AND APPARATUS FOR IMAGE ACQUISITION AND PROCESSING USING EXECUTABLE INSTRUCTIONS WITH DYNAMIC RESOURCE ALLOCATION

(51) International classification	:G06F0009500000, H04W0072040000, H04N0005232000, G06T0001200000, H04N0021250000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)Name of Applicant :
  1)Chitkara University
    Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------
  2)Bluest Mettle Solutions Private Limited
Name of Applicant : NA
Address of Applicant : NA
(72)Name of Inventor :
  1)MISHRA, Rahul
Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune ----------- -----------
  2)PANDEY, Sakshi
Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune ----------- -----------
  3)MANTRI, Archana
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------

(57) Abstract :
The present subject matter discloses a system for image acquisition and processing, incorporating imaging devices (102), a processor (104), and memory (106) housing versatile executable instructions. A dynamic resource allocation unit (108) optimizes resource usage, dynamically adjusting CPU and GPU resources based on real-time processing requirements. The system features a feedback loop (110) for continuous monitoring and resource adjustments, enabling adaptive processing tailored to diverse image types and applications. This comprehensive system ensures efficient real-time image processing across domains, optimizing resource allocation and enhancing performance.

No. of Pages : 17 No. of Claims : 10