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(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)Dr. KUMOD KUMAR GUPTA**  
 Address of Applicant :Department of Computer Science & Engineering (AI), Noida Institute of Engineering & Technology, Greater Noida. Greater Noida -----  
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(57) Abstract :  
 An interactive number line projector system comprises a projection unit (101), pointer stylus (102), gesture sensor (103), computing module (104), and interface (105) for dynamic visualization of integers and rational numbers. Visual markers (106), directional arrows (107), and auditory prompts (108) aid in real-time learning. The invention supports gesture-based input, fractional segmentation, and interactive quizzes, promoting conceptual clarity through multisensory engagement. It offers a scalable, portable solution for math instruction, improving learner participation and comprehension across age groups.

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