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(57) Abstract :

Embodiments of the present disclosure relates to a system (100) and method (300) for automatic stepwise tooth movement in orthodontic treatment by combining digital imaging, data analysis, and AI techniques to automate and optimize the process of tooth alignment and movement. The system (102) comprises a processor (202) coupled to a memory (204). The memory (204) stores processor-executable instructions. The processor (202) is configured to capture one or more high-resolution digital images of teeth of a user. Next, the processor (202) is configured to analyse the captured one or more high-resolution digital images to create a dental treatment plan. Thereafter, the processor (202) is configured to apply controlled forces to the teeth based on the dental treatment plan. In the end, the processor (202) is configured to monitor changes in movement of the teeth to enable adjustment of treatment parameters in real-time.

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