



New York University School of Medicine
Office of Industrial Liaison/Technology Transfer

Fractal Planet

Graphics

Principal Inventor:

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Description of the Technology:

With Progressive Rendering, content providers can offer users views of rule-generated virtual worlds as soon as they are requested allowing users to explore them immediately and fluidly. This technique gives the user a good sense of the scene's appearance within a second, even in cases where a full rendering would take over a minute.

Features and Benefits:

This invention allows its user to interact with a procedurally generated image at interactive frame rates, while maintaining the following properties:

- If the user fixes on a particular view for any significant period of time, the picture will continually "develop", increasing smooth image quality.
- This is done in such a way that for a given view, no pixel color need ever be computed more than once.
- No intermediate storage of already computed samples is required.

Applications:

This technology is valuable because it enables the technique to work in situations where there is only one-way communication from the algorithm to the display device. It can also be used in the fields of advancing new software.

Patent Status:

U.S. and international patent applications pending.

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