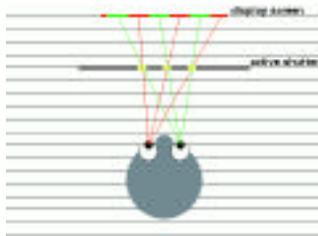
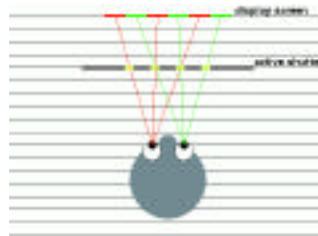


In this display, observers can freely change position, rotate their heads, and maintain a true stereoscopic view without using special eyewear. Since no fixed parallax barrier geometry could accommodate arbitrary observer position and orientation, the system creates a dynamically varying parallax barrier that continually changes the width and positions of its stripes as the observer moves. Large

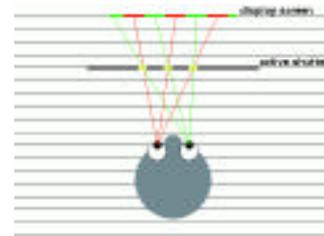
stripes would be easily seen by the unaided eye, so the system rapidly animates them in a lateral direction. Each stripe is composed from some number of very slender microstripes, each of which is a switchable LCD element. The result: a stereoscopic display that is continually exact for one moving user, as long as their eye position is tracked.



Phase I

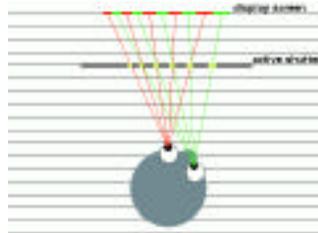


Phase II



Phase III

The three phases of the parallax barrier animation cycle.



One phase shown for a viewer with head turned.

Collaborators

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