What Is Claimed Is:

- 1. Glasses (spectacles) having lenses with variable light transmission density that is controlled by an applied electric voltage, a light sensor capable of sensing visible light and having a fast response time, and amplification and control circuitry suitable for controlling the voltage applied to the lenses so as to cancel the majority of the flicker that is present in the incident light.
- 2. The glasses of claim 1, with signal processing to identify and isolate the flicker component of incident light, whether said signal processing is performed by analog electronic circuitry, digital electronic circuitry, digital computer processing, or any combination of these.
- 3. The glasses of claim 1 or claim 2, where signal processing techniques are used, which may include low-pass filtering, high-pass filtering, bandpass filtering, Fourier spectral analysis, autocorrelation, time delays, feedback, or other advanced techniques.
- 4. The glasses of claim 1 or claim 2, where an adjustment control is provided to allow the wearer of the glasses to adjust the overall darkness of the lenses.
- 5. The glasses of claim 1 or claim 2, where an adjustment control is provided to allow the wearer of the glasses to adjust the degree of cancellation of the flicker component of incident light.
- 6. The glasses of claim 1 or claim 2, incorporating a memory component in which a representation of the flicker waveform of the light can be stored, and the use of this memory of the flicker waveform to improve cancellation of the flicker by the variable density lens.
- 7. The glasses of claim 1 or claim 2, using a digital camera as a light sensor and incorporating signal processing of the camera output to control lens densities.

- 8. The glasses of claim 1 or claim 2, incorporating a digital camera or light sensors that can sense light intensity in a plurality of separate areas or pixels, and incorporating photochromic lenses that allow darkening of separate areas or pixels, and incorporating signal processing of the light intensity measured by the light sensors to control the lens densities of the areas or pixels of the photochromic lens to cancel flicker or light impulses within those areas.
- 9. The glasses of claim 1 or claim 2, incorporating one or more additional light sensors behind the variable density lens, and the use of the signal provided by the additional sensors to improve control of the variable density lens.
- 10. The glasses of claim 1 or claim 2, incorporating one or more additional light sensors behind the variable density lens, as well as one or more independent light sources in front of the lens, to measure the photochromic density of the lens, and the use of said measurements to improve flicker cancellation.
- 11. The glasses of claim 1 or claim 2, incorporating feedback control or machine learning to improve the cancellation of flicker.
- 12. The use of the techniques of the above claims to control the density of a window, windshield, face shield, camera lens, or other variable density transparent media, to remove flicker or to defend against possibly harmful or distracting light sources such as lasers aimed at a driver, pilot, military soldier, or public safety officer.