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[54] ACCELERATED WEATHERING APPARATUS

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[58] Field of Search **250/504 R, 492.1, 493.1, 250/494.1; 34/4**

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[57] ABSTRACT

A Weathering apparatus having a light source which irradiates onto specimens located in a specimen supporting wall which is located on a side of a test chamber. The output of the light source is controlled by independently adjustable control channels. Each of the control channels include a light source detector inserted into the test chamber, control circuitry, and ballasts connected to the light sources. The light sources are controlled by the control channels to deliver an output equivalent to a desired set-point. In order to disperse light in an even manner to the specimens, a barrier is provided which interferes in a predetermined pattern with the passage of light produced by the light sources. The apparatus includes a calibrating device which automatically transfers an irradiance signal from a reference detector selectively positioned immediately adjacent the light source detector. The calibration signal is sent to the controller where the re-calibration of a selected control channel is accomplished.

21 Claims, 9 Drawing Sheets

