



US005138892A

United States Patent [19]

[11] Patent Number: 5,138,892

Suga

[45] Date of Patent: Aug. 18, 1992

[54] ACCELERATED LIGHT FASTNESS TEST METHOD

61935 3/1988 Japan 374/57
746208 7/1980 U.S.S.R. 374/57

[75] Inventor: Shigeru Suga, Tokyo, Japan

[73] Assignee: Suga Test Instruments Co., Ltd., Tokyo, Japan

[21] Appl. No.: 524,049

[22] Filed: May 16, 1990

[30] Foreign Application Priority Data

Aug. 17, 1989 [JP] Japan 1-211639

[51] Int. Cl.⁵ G01N 17/00

[52] U.S. Cl. 73/865.6; 374/57

[58] Field of Search 73/865.6; 374/57

[56] References Cited

U.S. PATENT DOCUMENTS

2,523,322	9/1950	Ornstein et al.	374/57
3,576,125	4/1971	Kockott et al.	374/57
3,797,918	3/1974	Kockott	73/865.6 X
4,627,287	12/1986	Suga	73/865.6
4,634,290	1/1987	Roencwaig et al.	374/57 X
4,706,903	11/1987	Suga et al.	73/865.6 X
4,760,748	8/1988	Katayanagi et al.	374/57 X
4,807,247	2/1989	Robbins, III	374/57
4,817,447	4/1989	Kashima et al.	73/865.6
4,995,273	2/1991	Kisima et al.	73/865.6

FOREIGN PATENT DOCUMENTS

544	1/1982	Japan	73/865.6
14740	1/1982	Japan	73/865.6
32847	2/1984	Japan	374/57
117128	6/1985	Japan	374/57

OTHER PUBLICATIONS

Patent Abstracts of Japan; Grp. p. 971, vol. 13, No. 547, Abs. Pub. Date Dec. 7, 1989 (01-227944).

Patent Abstracts of Japan; Grp. p. 282, vol. 8, No. 137, Abs. Pub. Date Jun. 26, 1984 (59-37446).

Primary Examiner—Tom Noland

Attorney, Agent, or Firm—Wenderoth, Lind & Ponack

[57] ABSTRACT

A method of carrying out an accelerated light fastness test on a sample of a material to be used under certain conditions of air convection along the surface thereof, is constituted by the steps of positioning a sample to be tested with the surface thereof which is exposed to light during intended conditions of use of the material spaced at a distance from a light source having a constant intensity of light radiated therefrom for causing the surface of the sample to receive a desired intensity of light, and positioning a filter between the surface of the sample and the light source and spaced a distance from the surface of the sample for causing air between the filter and the sample to be at the convection conditions corresponding to the certain conditions of air convection at the surface of the material under its intended conditions of use, whereby the temperature conditions of the material at the surface facing the source of light are made to correspond to the temperature conditions during the intended use of the material.

1 Claim, 4 Drawing Sheets

