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[54] **METHOD OF INTERPRETING SPECTROMETRIC DATA**

[75] Inventors: **Roman Z. Morawski**, Warsaw, Poland; **Andrzej Barwicz**; **Mohamed B. Slima**, both of Trois-Rivières, Canada; **Andrzej Miekina**, Warsaw, Poland

[73] Assignee: **Measurement Microsystems A-Z Inc.**, Trois-Rivières, Canada

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[52] **U.S. Cl.** **356/326**

[58] **Field of Search** 356/326, 328, 356/301, 330–334; 250/339.13, 339.07, 339.01, 338.5; 702/28

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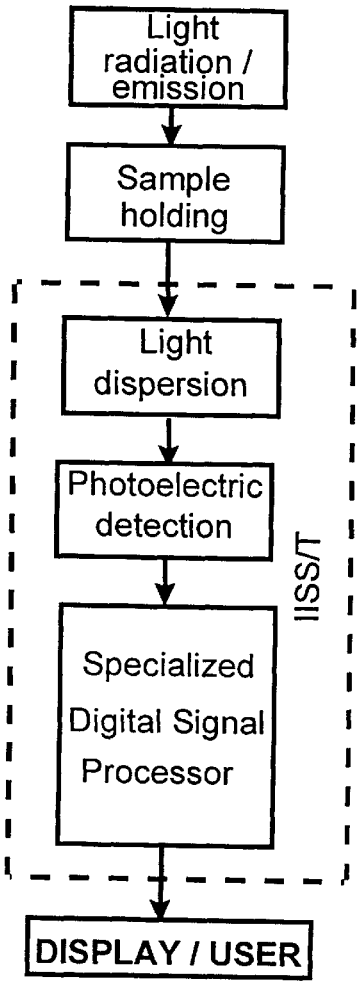
Primary Examiner—K P Hantis
Attorney, Agent, or Firm—Neil Teitelbaum & Associates

[57] **ABSTRACT**

A method for spectral measurement is disclosed. The method uses a low-resolution grating to disperse light and thereby image a spectrum thereof. The imaged spectrum is converted into a digital electrical signal and is processed in order to enhance the spectral information. The resulting spectral information is analogous to that captured using a higher resolution spectral imager with optical processing of the spectral data. The method is equally applicable to enhancing resolution of spectra captured using high resolution spectral imaging devices.

18 Claims, 23 Drawing Sheets