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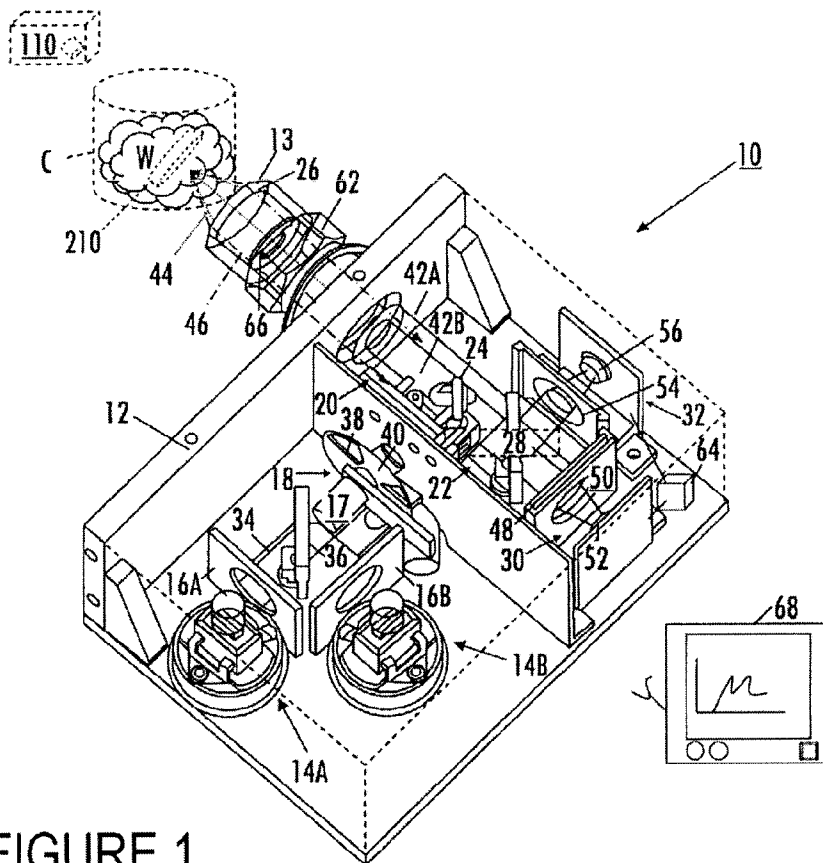


FIGURE 1

(57) Abstract: A method of classifying information in an optical analysis system includes obtaining calibration data defining a plurality of data points, each data point representing values for two or more detectors when sampling a material [W] used to construct a multivariate optical element [38]. Based on the calibration data, one or more validation models can be developed to indicate one or more ranges of expected results. Validation data comprising the models can be used to compare data points representing values for two or more detectors when performing a measurement of a material to determine if the data points fall within an expected range. Classification data can be generated based on the comparison and, in some embodiments, one or more indicators, such as a confidence level in a measurement, can be provided.

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,952,267 B2 (Rarac) 4 October 2005 (4.10.2005). see entire reference.	1,2, 9, and 16

Further documents are listed in the continuation of Box C.       See patent family annex.

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"O"	document referring to an oral disclosure, use, exhibition or other means	
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