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- (74) Agent: **GOREN, David J.**; Fish & Richardson P.C., P. O. Box 1022, Minneapolis, Minnesota 55440-1022 (US).
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Declarations under Rule 4.17:

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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[Continued on next page]

- (54) Title: CONSTRUCTION OF REFERENCE SPECTRA WITH VARIATIONS IN ENVIRONMENTAL EFFECTS

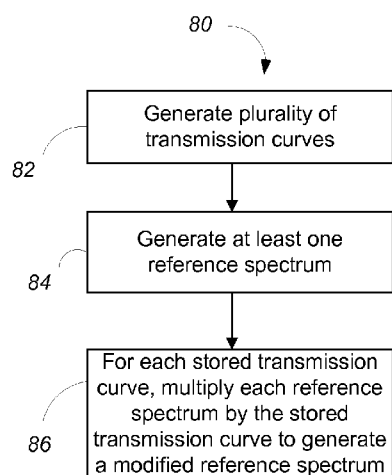


FIG. 5A

(57) Abstract: A method of generating a library of reference spectra includes storing at least one reference spectrum, storing a plurality of different transmission curves, and for at least two transmission curves from the plurality of different transmission curves, calculating a modified reference spectrum from the reference spectrum and the transmission curve to generate a plurality of modified reference spectra. The transmission curves represent distortion to a spectrum introduced by variations in components in an optical path before a substrate surface.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/034109**A. CLASSIFICATION OF SUBJECT MATTER*****H01L 21/66(2006.01)i, H01L 21/304(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

H01L 21/66; G06F 15/00; G01B 11/02; G01B 11/06; G01R 33/12; G01N 21/00; G01B 11/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: CMP,endpoint,reference,spectrum,correction,modify,calibration,fit

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2010-0103422 A1 (DAVID JEFFREY DRUE et al.) 29 April 2010 See abstract; figure 6; paragraphs [0019]-[0064]	1-14
Y	WO 00-57127 A1 (SENSYS INSTRUMENTS CORPORATION) 28 September 2000 See page 19 line 30 - page 20 line 21	1-14
A	US 2007-0019205 A1 (WHAN NAMKOONG) 25 January 2007 See figures 4-8; paragraphs [0044]-[0093]	1-14
A	US 6707540 B1 (LEHMAN; KURT R. et al.) 16 March 2004 See figures 2, 5; column 6 line 22 - column 7 line 52, column 13 lines 10-47	1-14

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

* Special categories of cited documents:

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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