

Below are lists of patents on which Dr. Matthew S. Klee is an inventor; all of which he was also actively involved in authoring and prosecuting.

### **Granted Patents**

1. Non-seizing tapers for use in purged connections of capillary tubing used in gas chromatography, Matthew S. Klee, US 8845794B2, July 22, 2014
2. System for integrated backflush in a gas chromatograph, July 3, 2012, US 8210026, *Klee; Matthew S.* (Wilmington, DE), Gajdos; Lawrence John (Chadds Ford, PA), Quimby; Bruce Douglas
3. System and Method For Controlling Fluid Flow, US 7503340, Matthew S. Klee, Michael Q. Thompson, James D. McCurry, Paul C. Dryden, Mar. 17, 2009
4. Seal for gas chromatography, Emmons; William James; (Hockessin, DE) ; Norman; Wesley Miles; (Landenberg, PA) ; Klee; Matthew S., [US 7384457B2, October 6, 2008]; [CN 101017161, August 15, 2007]
5. Focusing device based on bonded plate structures, M. S. Klee, W. Norman, US 7287441 (10/07), US 6966212 (Nov. 22, 2005)
6. Mass spectrometry performance enhancement, GB2406965B, 2006-11-29, Matthew S. Klee
7. Method of matching retention times among multiple chromatographic system, Quimby; Bruce D; Klee; Matthew S.; Dryden; Paul C.; Axelson; Elmer A; US 6915227B2 (July 5, 2005); and US 6691053 (February 10, 2004)
8. Chromatographic system and method, Quimby; Bruce D; Klee; Matthew S.; Dryden; Paul C.; Axelson; Elmer A, GB2383963B, 2005-02-23
9. Retention-time locked comprehensive multidimensional gas chromatography, Matthew S. Klee, US 6494078B1, Dec. 17, 2002
10. Methods for sample identification using pattern recognition under locked conditions. Klee; Matthew S.; Quimby; Bruce D.; US 6493639, December 10, 2002
11. Hydrocarbon class separation and quantitation by split column effluent analysis, Matthew S. Klee, Wang; Mu Zou US 6183635, February 6, 2001; US 5346622 (1994)

12. Retention Factor Database, Matthew S. Klee, US 6153438, November 28, 2000
13. Automated Retention Time Locking, Matthew S. Klee, Leonid M. Blumberg, Bruce D. Quimby, US 5987959, November 23, 1999
14. Method for Sample Identification using a Locked Retention Time Database, Matthew S. Klee, Phil L. Wylie, Bruce D. Quimby, Leon M. Blumberg, US 5827946 (1998)

### **Published Applications**

1. Fluid Multiplexer for Capillary Column Gas Chromatograph, [JP2008275601A]; [US20080264491A1, 2008-10-30]; [DE102008015974A1]; [GB2448796A] Matthew S. Klee, Wesley Norman, 2008-11-13
2. System and Method for Controlling Flow of Fluid, Klee; Matthew S., Thompson; Michael Q., McCurry; James D., Dryden; Paul C., [DE102006038405A1, July 4, 2007]; [JP2007101538]
3. Seal for gas chromatography, Emmons; William James; (Hockessin, DE) ; Norman; Wesley Miles; (Landenberg, PA) ; Klee; Matthew S., CN 101017161, August 15, 2007
4. Fluid coupling, Norman; Wesley Miles, Klee; Matthew S. US20070000828A1, January 4, 2007
5. Apparatus and method for pumping microfluidic devices, Matthew S. Klee, US20050249607A1, Nov. 10, 2005
6. Chemical Sensor Means in Fuel Cell System, Drake Javit A., Wilson William H., Klee Matthew S., [EP1383192 A3, December 21, 2005]; [JP 2004039632]
7. Spectrum Correction Method of Mass Spectrometer, JP2005121653A, May 12, 2005
8. Mass Spectrometer, Matthew S. Klee, JP2005121654A, May 12, 2005
9. Mass spectrometry spectral correction., Matthew S. Klee; US20050080578A1, April 14, 2005
10. Mass spectrometry performance enhancement., Matthew S. Klee,

US20050080571A1, April 14, 2005

11. Mass spectrometry performance optimization., Matthew S. Klee, GB2406965A, April 13, 2005

12. Mass spectrometry spectral correction, Matthew S. Klee, GB2406966A, April 13, 2005

13. Chemical sensing in fuel cell systems, Javit Drake, William Wilson, Matthew Klee, US20040005494A1, 1/8/2004

14. Chemical Sensor Means in Fuel Cell System, Drake Javit A., Wilson William H., Klee Matthew S., JP2004039632A, February 2, 2004

15. Correcting the time axis of local chromatographic data in comparison to stored reference data. GB2383963A, Bruce Quimby, Matthew S. Klee, 2003-07-16

16. Method for Matching Retention Time Between a Plurality of Chromatography System, JP2003194795A, Quimby; Bruce D; Klee; Matthew S.; Dryden; Paul C.; Axelson; Elmer A, July 9, 2003

17. Verfahren zum Anpassen von Haltezeiten zwischen mehreren Chromatographiesystemen, Quimby; Bruce D; Klee; Matthew S.; Dryden; Paul C.; Axelson; Elmer A; DE10255114A1, June 18, 2003