KENNETH A. PARULSKI
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PROFILE

- Widely recognized digital photography pioneer and inventor, with over 225 issued U.S. patents. Many have been broadly licensed, providing earnings of over $2 billion dollars from 2005 to 2010.
- Extensive experience in digital imaging research, product development, and intellectual property strategy development, licensing & litigation.
- Proven ability to work with a wide range of disciplines, and across companies and cultures, to develop new technologies, products, systems, industry standards & business partnerships.

Chief Scientist and Managing Member, **aKAP Innovation, LLC, Rochester, NY** (June 2012 – Present)

- Served as an expert consultant to more than fifteen U.S. and international imaging companies.
- Co-founder of Tour Blend, which provides geo-located content to mobile devices.
- Invited speaker for academic and industry seminars in the U.S., Europe, and Asia.

Chairman, IT10 Technical Committee for Digital Photography Standards (1994 – Present)

- Chair of group which provides the U.S. position on international standards for digital cameras.
- Project leader for ISO standards on image formats and metadata (ISO 12234 series), resolution measurements (ISO 12233), ISO speed and sensitivity (ISO 12232) and RIMM RGB extended color encoding (ISO 22028-3).
- Chair of U.S. Technical Advisory Group to ISO/TC42 since June 2013.

Chairman, ISO Technical Committee 42 – Photography (March 2007 – February 2013)

- Leader of ISO/TC42, with more than 100 experts from 12 participating countries. TC42 developed more than 170 ISO standards for digital and conventional photography.
- Built consensus on standards goals and priorities, and chaired international plenary meetings.
- Lead the effort to move the sponsorship of ISO TC42 from the I3A trade association to the IS&T imaging society in 2010, which greatly improved the efficiency while reducing costs.

PAST EMPLOYMENT - Eastman Kodak Company, Rochester, New York (Retired June 2012)

Research Fellow and Chief Scientist, Digital Cameras and Devices (Jan. 2010 to May 2012)

- Responsibilities included inventing and prototyping new digital photography technologies and systems, setting the intellectual property strategy and filing priorities for a $1 Billion business, and supporting corporate patent licensing and litigation efforts.
- Led a cross-organizational team which rapidly developed, prototyped, and patented new personalized, interactive digital imaging systems using cloud processing and printing.

Research Fellow and Director, IP & Standards, Consumer Digital Group (2001 to 2009)

- Technical leader of Kodak's digital camera IP licensing program. Worked with Kodak lawyers and outside licensing agents to create an extremely successful licensing business.
- Developed new features for digital cameras and digital photography systems, including personalized and dual-lens cameras, on-line sharing systems, and dock printers.
- Managed an $8 Million R&D collaboration with ITRI in Taiwan. Projects included components such as compact zoom lenses and optical films, and systems such as media players and 3D cameras.

Chief Architect, Kodak Digital Cameras, Digital & Applied Imaging Division (1995 to 2001)

- Inventor of key patents related to preview, processing, and wireless sharing of digital images.
- Developed new digital camera and digital system architectures and formats, including panoramic camera systems and retail, wholesale, and on-line systems for printing digital camera images.
- Managed all IP issues for the divestiture of a $50 million industrial camera subsidiary.

Platform Leader, Electronic Imaging Platform Center (1992 to 1995)

- Architect of Kodak's first generation consumer digital still cameras, including the Apple QuickTake 100 and QuickTake 150 cameras and the Kodak Digital Science DC40 camera.
- Headed projects to develop novel digital video cameras for commercial and medical applications.
- Kodak representative to the Advanced Television Research Program at MIT, which developed the source adaptive compression technologies used worldwide in digital TV systems. Co-inventor of a TV decoding patent which has been widely licensed by MIT.

Group Leader, Electronic Photography Laboratory, Kodak Research Laboratories (1985 to 1991)

- Led Kodak R&D project which built the world's first color megapixel digital camera prototype, producing prints for Kodak's first public digital photography display in 1986 at Photokina.
- Developed an image processing VLSI chipset for digital video cameras. Designed high performance cameras for industrial and government applications using these Kodak ICs.
- Lead a major research study which developed and documented methods for comparing the image quality of megapixel CCD and 35mm film-based photographic systems.
- Key inventor of Kodak's CD based photo storage and TV display system.

Research Scientist, Image Science Laboratory, Kodak Research Laboratories (1980 to 1984)

- Developed color image processing algorithms and hardware.
- Key member of the team which developed a CCD scanner for displaying consumer film on TV, using a Kodak color sensor. This film video player was a highlight of Kodak's 1982 Photokina exhibit.

PUBLICATIONS AND PRESENTATIONS

- Over 70 external publications and presentations, including numerous invited talks on digital cameras and digital imaging systems in the US, Europe, and Japan.
- Author of the "Digital Photography" chapter in the *Consumer Digital Electronics Handbook* by MacGraw-Hill 1997; the "Color Image Processing for Digital Cameras" chapter in the *Digital Color Imaging Handbook*; CRC Press 2003; and the "Digital Camera Image Storage Formats" chapter in *Single-Sensor Imaging: Methods and Applications for Digital Cameras*, CRC Press 2008.
- Author of "Source Adaptive Encoding Options for HDTV and NTSC", which received the SMPTE Journal award in 1992.
- Created and taught Kodak courses on video technology and digital photography from 1983 to 2002.

AWARDS

- Life Fellow, Society of Motion Picture and Television Engineers – 2022.
- International Imaging Industries Association (I3A) Achievement Award, for "significant contributions to the advancement and growth of the imaging industry" – 2008.
- Photo-imaging Manufacturing & Distributors Association Technical Achievement Award for "pioneering work in the development of digital imaging technology" – 2002.
- Eastman Award (Kodak's top technical honor) for the development of digital cameras – 2001.
- Emmy Award (presented to Kodak) for developing the 24P HDTV standard – 2001.
- Kodak 'Team Achievement Awards' for VLSI chipset (1989) and PhotoCD System (1990).

EDUCATION

Massachusetts Institute of Technology – Cambridge, MA

- Master of Science in Electrical Engineering – May 1980
- Bachelor of Science in Electrical Engineering and Computer Science, minor in Political Science
- Student Employment
    - Motorola Corporate Research Labs - Developed a wireless mobile digital image transmission system for Master's thesis, supervised by Prof. William Schreiber.
    - U.S. Senate, Washington D.C., Fall 1976 - Legislative Intern to Senator William Proxmire.

Kenneth A. Parulski – Publications and Presentations

1. K. A. Parulski, "Color Filters Patterns for Single-Chip Cameras", *International Electronc Imaging Exposition and Conference* Proceedings, pp. 24-39, Boston, MA, Sept. 1984.

2. K. A. Parulski, "Color Filters and Processing Alternatives for One-chip Cameras," *IEEE Trans. Electron Devices*, Vol. ED-32, No. 8, pp. 1381-1389, Aug. 1985.

3. G. Kennel, K. A. Parulski, et. al. "Determination of an Exposure Index for Electronic Cameras", *1985 SMPTE Conference*, October 1985.

4. M. Kriss, K. A. Parulski, et. al., "Critical Technologies for Electronic Still Imaging Systems, Proc SPIE, vol. 1082, *Applications of Electronic Imaging* (1989), pp 157-184.

5. L. J. D'Luna, K. A. Parulski, et al., "A Digital Video Signal Processor for Color Image Sensors," *ISSCC '89 Technical Digest*, pp. 158-159, Feb. 1989.

6. L. J. D'Luna, K. A. Parulski, et al., "A Digital Video Signal Post-Processor for Color Image Sensors," *CICC '89 Technical Digest*, pp. 24.2.1-24.2.4, May 1989.

7. K. A. Parulski, et al. "A Digital Color CCD Imaging System Using Custom VLSI Circuits," *IEEE Int. Conference on Consumer Electronics Digest of Technical Papers*, pp. 182-183, June 1989.

8. K. A. Parulski, et al. "A Digital Color CCD Imaging System Using Custom VLSI Circuits," *IEEE Trans. on Consumer Electronics*, Vol. 35, No. 3, pp. 382-389, Aug. 1989.

9. W. A. Cook, K. A. Parulski, et al., "A Digital Signal Processor for Linear Sensors", IEEE Custom Integrated Circuits Conference, 1990, pp. 7.5.1-7.5.4.

10. K. A. Parulski, et. al, "A High-performance Digital Color Video Camera", SPIE Vol.1448, *Camera and Input Scanner Systems* (1991), pp. 45-58, Feb. 1991.

11. L. J. D'Luna and K. A. Parulski, "A Systems Approach to Custom VLSI for a Digital Color Imaging System," *IEEE J. Solid State Circuits,* Vol. 26., pp. 727-737, May 1991.

12. L. J. D'Luna and K. A. Parulski, "A VLSI Digital Signal Processing Chipset for Color Imaging Systems," *Research Magazine* , pp. 4-7, Spring 1991.

13. K. A. Parulski, et. al. "Source Adaptive Encoding Options for Current and Future TV Systems, 1991 SMPTE Conference, Los Angeles, Oct. 1991.

14. K. A. Parulski, et al. "High-Performance Digital Color Video Camera," *Journal of Electronic Imaging,* Vol. 1, pp. 35-45, Jan. 1992.

15. K. A. Parulski, et. al. "Source Adaptive Encoding Options for HDTV and NTSC", NAB 1992 HDTV World Proceedings, Las Vegas.

16. K. A. Parulski "HDTV Transmission using Source Adaptive Encoding, ITEC '92: ITE Annual Convention Proceedings, July, 1992, Sapporo, Japan, pp. 261-262.

17. K. A. Parulski, et. al., "Image Sensors and Signal Processing for High Definition Digital Electronic Photography", *ITEC '92: ITE Annual Conv. Proc*., July, 1992, Sapporo, Japan, pp. 557-558.

18. K. A. Parulski, et. al. "Source Adaptive Encoding Options for HDTV and NTSC", SMPTE Journal, Vol. 101, Oct. 1992, pp. 674-683. (Winner of Journal Award).

19. K. A. Parulski, et. al., "Electronic Photography in the 1990s", *Proceedings of the International Symposium on Electronic Photography*, Koln, Germany, Sept. 1992, pp 1-7.

20. K. A. Parulski, et. al., "Technology for Non-NTSC Digital Cameras", *Electronic Imaging International Conference,* Boston, Oct.. 1992.

21. K. A. Parulski, "HDTV Transmission using Source Adaptive Encoding", Presentation to Boston Chapter of IS&T, Nov 4, 1992.

22. K. A. Parulski, "Electronic Photography in the 90s", *IEEE Joint Chapters Meeting* , Rochester, NY, March 17, 1993.

23. K. A. Parulski, et. al., "Digital, Still-Optimized Architecture for Electronic Photography", IS&T's 47th Annual Conference Proceedings, Vol. 2, May 1994, pp. 665-667.

24. G. E Lathrop and K. A. Parulski, "Advantages of Tag-Based Formats for Electronic Still Photography", IS&T's 47th Annual Conference Proceedings, Vol. 2, May 1994, pp. 630-633.

25. W. Hintz, K. A. Parulski, et. al., "Automatic Misregistration Correction for a Color Sequential Digital Still Camera", IS&T's 47th Annual Conference Proc., Vol. 2, May 1994, pp. 655-657.

26. T. J. Tredwell, K. A. Parulski, et. al., "Electronic Photography Applications of a 6.4 Megapixel Image Sensor", IS&T's 47th Annual Conference Proceedings, Vol. 2, May 1994, pp. 660-664.

27. R. Bouvy, K. A. Parulski, et. al., "A Progressive Scan 30-Frame Per Second Camera", SPIE Proceedings, Vol. 2416, Feb 1995.

28. K.A. Parulski and G. Lathrop, "TIFF/EP, A Flexible Image Format for Electronic Still Cameras, IS&T 48th Annual Conference, May 1995.

29. K.A. Parulski, et. al, "High-Performance Digital Cameras using Still Optimized Sensors" 70th Anniversary Fine Imaging Symposium, Japan, Oct. 1995

30. K.A. Parulski, "High-Performance Digital Cameras using Still Optimized Sensors" Boston Chapter, IS&T, Oct. 1995

31. K.A. Parulski and P. Jameson, "Enabling Technologies for a Family of Digital Cameras", Invited paper, IS&T/SPIE Proceedings Vol. 2654, Feb. 1996

32. K.A. Parulski, et. al, "A Family of Digital Cameras using Still Optimized Sensors" Anniversary Issue, Journal of the Society of Photographic Science and Technology of Japan", 1996

33. S. Noble and K. Parulski, "Design and Applications of a Family of 6.3 Megapixel Digital Cameras", ISEP '96, 3rd International Symposium on Electronic Photography, Koln, Germany, Sept. 1996.

34. R. Bouvy, J. Vincent, K. Parulski, K. Balch, G. Erickson and M Menadier, "The Fox Movietone News Preservation Project: The Progressive Scan CCD Camera", Vol 105, pp. 551-554, Sept. 1996.

35. K. Parulski, "Architectures and Applications for Digital Cameras", Invited paper, Joint OSA and Optics & Imaging in the Information Age Symposium, Rochester NY, Oct 1996.

36. S. Noble and K. Parulski, "Design of High Resolution Digital Cameras for Pre-press Applications", TAGA Conference, May 1997, Quebec City.

37. D. M. Lewis and K. A. Parulski, "Consumer Digital Photography: The Big Picture", Invited paper, IS&T's 50th Annual Conference, May 1997.

38. E. Higgins, A. Juenger, and K. Parulski, "Computation of ISO Draft Standard Spatial Frequency Response", IS&T's 50th Annual Conference, May 1997.

39. K. A. Parulski, "Digital Photography", Chapter 21 in "Digital Consumer Electronics Handbook", MacGraw-Hill, 1997.

40. E. Edwards, K. Parulski, and J. Holm, "Setting Standards: Developing Standards in Digital Photography", PEI, February 1998, pp. 48-53.

41. M. Rabbani and K. Parulski, "Digital Cameras", IEEE Signal Processing Magazine, March 1998, pg 28.

42. J. Adams, K. Parulski, and K. Spaulding, "Color Processing in Digital Cameras", IEEE Micro, Vol. 18, Nov. / Dec. 1998, pp. 20-31.

43. K. Parulski, "Digital Print Order Format", 1999 Kodak Developer Conference, Boston MA, January 1999.

44. J. Milch and K. Parulski, "Using Metadata to Simplify Digital Photography", IS&T PICS conference, April 1999.

45. K. Parulski and P. Gilman, “Digital Photography for Fun and Business” Imaging ’99 Short Course, June 1999, Rochester NY.

46. K. Parulski, “Why Standards Matter”, Kodak Technical Conference, Beijing, China, Sept. 1999.

47. S. Noble and K. Parulski, “Digital Camera Architectures and CCD Technology”, Kodak Technical Conference, Melbourne, Australia, Sept. 1999

48. K. Parulski, “Digital Camera Interface Standards”, 2000 Kodak Developer Conference, San Jose, CA, Jan. 2000

49. K. Parulski, “Digital Photography: From Light to Bytes”, Invited Lecture, George Eastman House, Rochester NY, Feb 2000.

50. K. Parulski and M. Rabbani, “The Continuing Evolution of Digital Cameras and Digital Photography Systems” (Invited paper), IEEE International Symposium on Circuits and Systems, May 2000, Geneva, Switzerland

51. J. Holm, E. Edwards, and K. Parulski, “Extended Colour Encoding Requirements for Photographic Applications”, Proc. of the CIE Color Experts Meeting, Scottsdale, Arizona, Nov. 2000.

52. M. Guidash and K. Parulski, “Digital Capture”, Industrial Physics Forum on Color Documents in the Internet Era, Rochester, NY, October 2001.

53. K. Parulski and Jack Holm, “Exif Print – An Industry Standard, Backward Compatible Image Format for Digital Photography”, I3A Technical Conference, PMA Feb. 24, 2002

54. P. Burns, S. Houchin, K. Parulski and M. Rabbani, “Using JPEG 2000 in Future Digital Cameras: Advantages and Challenges”, Proc. Int. Congress of Imaging Science 2002, Tokyo, SPSTJ, pp. 371-372, 2002

55. K. Parulski and Jack Holm, “Setting Standards for Digital Photography”, I3A Technical Conference, Nov. 2002

56. K. Spaulding and K. Parulski, “Color Image Processing for Digital Cameras”, Chapter in “Digital Color Imaging Handbook”, CRC Press 2003.

57. K. Parulski, “From Megapixels to Memories: The Challenges of Consumer Digital Photography”, Keynote address, IS&T PICS Conference, May 2003.

58.T. Looney, K. Parulski, and E Steinberg, “What is Picture Transfer Protocol? A Platform and Transport Independent Protocol / API for Communicating with Digital Still Cameras”, I3A Technical Conference, Nov. 2003.

59. R. Reisch, K. Miller-Mullins, K. Parulski and J. Holm "Metadata You Can Trust", I3A Technical Conference, Nov. 2003.

60. K. Parulski and R. Reisch "Digital Camera Image Storage Formats" Chapter in "Single-Sensor Imaging: Methods and Applications for Digital Cameras", Rastislav Lukac, CRC Press, 2009.

61. K. Parulski, "3D Image Capture: History, Technologies and Opportunities" presented at the ITRI International Workshop for 3D & Medical Image Technology, Industrial Technology Research Institute, Taiwan, Nov. 2012.

62. K. Parulski, "User Experiences in Digital Photography", presented at the Rochester Institute of Technology, Rochester NY, Jan. 2013 and Feb. 2014.

63. K. Parulski, "An Inventor's Dilemma: The gap between disruptive ideas and employer resources", presented at European Forum Alpbach, Tirol, Austria, Aug. 2014.

64. K. Parulski, "Intellectual Property Basics", presented at the Rochester Institute of Technology, Rochester NY, Nov. 2014.

65. K. Parulski, "Digital Photography - Technology and History", presented at the George Eastman House, Rochester NY, Sept. 18, 2015 and Nov. 4, 2016.

66. S. Farnand and K. Parulski, "Color Calibration of Unmanned Aerial System Digital Still Cameras", IS&T International Symposium on Electronic Imaging 2018, Image Quality and System Performance XV, Feb 2018.

67. P. Dillon, A. Brault and K. Parulski, "Inventing Color Image Sensors", presented at the George Eastman Museum, Rochester NY, Dec 7, 2019.

68. K. Parulski, "Who Invented Digital Cameras? The evolution of a dominant design", Webinar presentation to the MIT Clubs of Rochester and Western NY, Sept. 8, 2020.

69. K. Parulski, "The Development of Integral Color Image Sensors and Cameras", Invited Plenary Talk, IS&T International Symposium on Electronic Imaging 2021, Jan. 21, 2021

70. K. Parulski, "The History of Integral Color Image Sensors and Cameras", Invited Talk, Eclipse Optics Seminar (Sweden), April 21, 2021

71. K. Parulski, D. Wueller, P. Burns and H Yoshida "Creation and Evolution of ISO 12233, the International Standard for Measuring Digital Camera Resolution", Electronic Imaging 2022, Image Quality and System Performance XIX pp. 347-1-347-7, January 2022

72. P. Burns, K. Masaoka, K. Parulski and D. Wueller, "Updated Camera Spatial Frequency Response for ISO 12233", IS&T International Symposium on Electronic Imaging 2022 IQSP-347, Image Quality and System Performance XIX, pp. 357-1-357-6, January 2022

#	Patent No.	Published	Priority	Title	Inventor(s)
230	10929463	2/23/2021	2/16/2015	Arranging location based content for mobile devices	Colosky, Parulski, O'Keefe, Moore
229	10817563	10/27/2020	2/16/2015	Providing location based content to mobile devices	Colosky, Parulski, O'Keefe, Moore
228	10289273	5/14/2019	8/29/2011	Display device providing feedback based on image classification	Liao, Parulski, Nichols
227	10142795	11/27/2018	2/16/2015	Providing digital content for multiple venues	Colosky, Parulski, O'Keefe, Moore
226	10136260	11/20/2018	3/22/2013	Selectively providing mobile experiences at multiple locations	Parulski, O'Keefe, Moore
225	9979683	5/22/2018	6/26/2001	System and method for managing images over a communication network	McIntyre, Parulski
224	9686469	6/20/2017	7/26/2010	Automatic digital camera photography mode selection	Razavi, Pillman, Parulski
223	9497333	11/15/2016	6/2/1999	System and method for providing customized product configuration and service plan options for a camera device	Wolcott, McIntyre, Parulski
222	9462181	10/4/2016	3/3/2010	Imaging device for capturing self-portrait images	Fredlund, Parulski, Guidash, Spaulding, Razavi
221	9454280	10/27/2016	9/29/2011	Display device providing feedback based on image classification	Liao, Parulski, Nichols
220	9270882	2/23/2016	7/26/2010	System and method for contextual digital photography mode selection	Razavi, Pillman, Parulski
219	9247306	1/26/2016	5/21/2012	Forming a multimedia product using video chat	O'Keefe, Parulski
218	9082046	7/14/2015	12/26/2001	Method for creating and using affective information in a digital imaging system	Matraszek, Fedorovskaya, Endrikhovski, Parulski
217	9055276	6/9/2015	7/29/2011	Camera having processing customized for identified persons	Parulski
216	9049388	6/2/2015	7/11/2005	Methods and systems for annotating images based on special events	Gallagher, Fryer, Loui, Oliver, Eckhaus, Parulski
215	8970720	3/3/2015	6/26/2010	Automatic digital camera photography mode selection	Razavi, Pillman, Parulski
214	8957981	2/17/2015	3/3/2010	Imaging device for capturing self-portrait images	Fredlund, Parulski, Guidash, Spaulding, Razavi
213	8934043	1/13/2015	6/17/2001	Revised recapture camera and method	Parulski, Desormeaux
212	8866930	10/21/2014	2/20/1997	Digital camera with communications interface for selectively transmitting images over a cellular phone network and a wireless LAN network to a destination	Ward, Parulski, Allen
211	8780180	7/15/2014	5/13/2011	Stereoscopic camera using anaglyphic display during capture	Parulski
210	8750674	6/10/2014	9/26/2011	Remotely controllable digital video camera system	Cornell, Parulski
209	8736694	5/27/2014	4/24/1995	Transmitting digital images to a plurality of selected receivers over a radio frequency link	Parulski, Schueckler
208	8717461	5/6/2014	7/11/2005	Identifying collection images with special events	Gallagher, Fryer, Loui, Oliver, Eckhaus, Parulski
207	8688764	4/1/2014	4/22/2001	System, method and software product for ordering image products using images stored on a digital storage device from a plurality of order terminals	Chauvin, Bussey, Dobbs, Parulski, Thompson, Foster, Gotham
206	8675112	3/18/2014	6/24/2011	Imaging device providing capture location guidance	Arujunan, Nichols, Parulski, Murray, O'Keefe
205	8630496	1/14/2014	12/26/2001	Method for creating and using affective information in a digital imaging system	Matraszek, Fedorovskaya, Endrikhovski, Parulski
204	8621047	12/31/2013	6/26/2001	System and method for managing images over a communication network	McIntyre, Parulski
203	8612308	12/17/2013	3/24/2000	System and method for providing a configured camera, image products, and services	Wolcott, McIntyre, Parulski
202	8589241	11/19/2013	5/19/2000	System and method for facilitating imaging services using a service identification number stored in an image capture device	Wolcott, McIntyre, Parulski
201	8508623	8/13/2013	4/15/1997	Image file for storing digital images and ancillary data values using multiple encoding methods	Parulski, Ward, Lathrop, Houchin, Jennings, Vansprewenburg
200	8405740	3/26/2013	6/24/2011	Guidance for image capture at different locations	Nichols, Parulski, Arujunan, Murray, O'Keefe
199	8358358	1/22/2013	7/11/2005	Identifying collection images with special events	Gallagher, Fryer, Loui, Oliver, Eckhaus, Parulski
198	8320025	11/27/2012	12/6/2000	Providing multiple payment schedules for storing images and utilizing the stored images	Jackson, Parulski
197	8184916	5/22/2012	12/26/2001	Method for creating and using affective information in a digital imaging system	Matraszek, Fedorovskaya, Endrikhovski, Parulski
196	8139126	3/20/2012	3/19/2004	Digital video system for assembling video sequences	Manico, Fredlund, Parulski, Telek, McCoy
195	8046270	10/25/2011	5/19/2000	System and method for providing image products and/or services	Wolcott, McIntyre, Parulski
194	8036467	10/11/2011	12/26/2001	Method for creating and using affective information in a digital imaging system	Matraszek, Fedorovskaya, Endrikhovski, Parulski
193	8035747	10/11/2011	3/12/2007	Image digital processing based on edit status	Fredlund, Deever, Bryant, Parulski, Parada
192	7999860	8/16/2011	4/15/1997	Image file for storing digital images and ancillary data values using multiple encoding methods	Parulski, Ward, Lathrop, Houchin, Jennings, Vansprewenburg
191	7978239	7/12/2011	3/1/2007	Digital camera using multiple image sensors to provide improved temporal sampling	Deever, Parulski, Fredlund, Rabbani, Kurtz, Manico

190	7965310	6/21/2011	5/11/2000	System and camera for transferring digital images to a service provider	Endsley, Bryant, Fredlund, Parulski
189	7952616	5/31/2011	4/24/1995	Transmitting digital images to a plurality of selected receivers over a radio frequency link	Parulski, Schueckler
188	RE42337	5/10/2011	2/20/1997	Network configuration file for automatically transmitting images from an electronic still camera	Ward, Parulski, Allen
187	7936391	5/3/2011	2/20/1997	Digital camera with communications interface for selectively transmitting images over a cellular phone network and a wireless LAN network to a destination	Ward, Parulski, Allen
186	7933474	4/26/2011	12/26/2001	Method for creating and using affective information in a digital imaging system	Matraszek, Fedorovskaya, Endrikhovski, Parulski
185	7893963	2/22/2011	5/19/2005	Digital camera which estimates and corrects small camera rotations	Gallagher, Parulski
184	7859588	12/28/2010	3/9/2007	Method and apparatus for operating a dual lens camera to augment an image	Parulski, Janson, Border, Fredlund, Manico, Parada
183	7840634	11/23/2010	6/26/2001	System and method for managing images over a communication network	McIntyre, Parulski
182	7782372	8/24/2010	2/24/1998	Image file for storing digital images and ancillary data values using multiple encoding methods	Parulski, Ward, Lathrop, Houchin, Jennings, Vansprewenburg
181	RE41542	8/17/2010	4/24/1995	Cellular telephone and electronic camera system with programmable transmission capability	Parulski, Schueckler
180	RE41524	8/17/2010	12/20/1995	Electronic still camera for capturing and categorizing images	Paurulski, Napoli, Lewis
179	7755662	7/13/2010	4/4/1997	Digital camera providing image processing for an attachable printer	Parulski, Small, Couwenhoven, VanBlargan, Wess
178	7743110	6/22/2010	1/18/2002	System, method and software product for ordering image products over a communication network from a plurality of different providers having various business relationships, using images stored on a digital storage device	Chauvin, Bussey, Dobbs, Parulski, Thompson, Foster, Gotham
177	7742084	6/22/2010	2/20/1997	Network configuration file for automatically transmitting images from an electronic still camera	Ward, Parulski, Allen
176	7729602	6/1/2010	3/9/2007	Camera using multiple lenses and image sensors operable in a default imaging mode	Janson, Parulski
175	7701490	4/20/2010	2/20/1997	Automatically transmitting images from an electronic camera to a service provider using a network configuration file	Ward, Parulski, Allen
174	7676146	3/9/2010	3/9/2007	Camera using multiple lenses and image sensors to provide improved focusing capability	Border, Palum, Janson, Parulski, Jacoby
173	7675556	3/9/2010	8/7/2002	Cameras, other imaging devices, and methods having non-uniform image remapping using a small data-set of distortion vectors	Smith, Parulski
172	7643704	1/5/2010	2/4/2005	Cropping a digital image and preserving reserves	Jackson, Parulski,McGarvey
171	7620270	11/17/2009	12/26/2001	Method for creating and using affective information in a digital imaging system	Matraszek, Fedorovskaya, Endrikhovski, Parulski
170	7616248	11/10/2009	7/17/2001	Revised recapture camera and method	Parulski, Malloy-Desormeaux
169	7587337	9/8/2009	3/24/2000	Leasing configured camera system	Parulski, Kenneth A.
168	7586532	9/8/2009	6/2/1999	Customizing a digital camera using firmware components provided by a service provider over a network	Prabhu, Miller, Akyuz, Wasula, Tintera, Parulski
167	7561191	7/14/2009	2/18/2005	Camera phone using multiple lenses and image sensors to provide an extended zoom range	May, Ludington, Parulski, Janson
166	7525680	4/28/2009	10/18/2000	Effective transfer of images captured by a digital camera to a remote location	Berarducci, Parulski, Fredlund
165	7509668	3/24/2009	3/24/2000	Leasing a configured camera system	Parulski, Kenneth A.
164	7495697	2/24/2009	2/20/1997	Network configuration file for automatically transmitting images from an electronic still camera	Ward, Parulski, Allen
163	7492389	2/17/2009	2/20/1997	Electronic camera having an interface for selecting users permitted to view transferred images	Parulski, Ward, Hopwood
162	7466336	12/16/2008	9/5/2002	Camera and method for composing multi-perspective images	Regan, Parulski
161	7453605	11/18/2008	7/1/2005	Capturing digital images to be transferred to an e-mail address	Parulski, Ward, Hopwood
160	7453498	11/18/2008	12/8/2005	Electronic image capture device and image file format providing raw and processed image data	Prentice, Yamagata, Parulski
159	7443418	10/28/2008	4/11/2003	Method for producing electronic job pages	Bryant, Parulski, Lyon, Wolf
158	7418116	8/26/2008	4/30/2007	Imaging method and system	Fedorovskaya, Endrikhovski, Matraszek, Parulski, Zacks, Taxier, Telek, Marino, Harel
157	7408582	8/5/2008	5/20/2004	Methods for configuring a digital camera and for display digital images	Prabhu, Miller, Akyuz, Wasula, Tintera, Parulski
156	7369164	5/6/2008	4/11/2003	Using favorite digital images to organize and identify electronic albums	Bryant, Parulski, Lyon, Wolf
155	7349010	3/25/2008	4/11/2003	Digital camera including an on-line sales mode	Bryant, Parulski, Lyon, Wolf
154	7327505	2/5/2008	2/19/2002	Method for providing affective information in an imaging system	Fedoroyskaya, Endrikhorski, Matrasszek, Parulski, Mir
153	7319780	1/15/2008	11/25/2002	Imaging method and system for health monitoring and personal security	Fedoroyskaya, Endrikhorski, Parulski, Zacks, Taxier, Telek, Manico, Harel
152	7307636	12/11/2007	12/26/2001	An image format including affective information	Matraszek, Fedorovskaya, Endrikhovski, Parulski

151	7305180	12/4/2007	2/18/2005	Digital camera using multiple lenses and image sensors to provide an extended zoom range	Labaziewicz, Janson, Parulski
150	7304677	12/4/2007	6/2/1999	Customizing a digital camera based on demographic factors	Keelan, Wheeler, Parulski, Prabhu
149	7301568	11/27/2007	8/7/2002	Cameras, other imaging devices, and methods having non-uniform image remapping using a small data set of distortion vectors	Smith, Parulski
148	7295244	11/13/2007	3/26/2002	System for capturing and archiving motion video segments	Manico, Fredlund, Parulski
147	7292267	11/6/2007	9/12/1996	Dual mode digital imaging and camera system	Prentice, Berarducci, Parulski
146	7289663	10/30/2007	7/24/2002	Producing an extended color gamut luminance-chrominance digital image from a captured image	Spaulding, Parulski, Prentice
145	7275044	9/25/2007	8/22/2001	System, method and software product for ordering image products over a communication network from a plurality of different providers having various business relationships	Chauvin, Bussey, Dobbs, Parulski, Thompson, Foster, Gotham
144	7271832	9/18/2007	4/15/1997	JPEG compatible image file format using multiple application segments	Parulski, Ward, Lathrrop, Houchin, Jennings, Vansprewenburg
143	7271809	9/18/2007	2/19/2002	Method for using viewing time to determine affective information in an imaging system	Fedorovskaya, Endikhovski, Matraszek, Parulski, Mir
142	7260546	8/21/2007	3/24/2000	Method for providing image goods and / or services to a customer	McIntyre, Willand, Brumlow, White, Parulski
141	7256944	8/14/2007	2/18/2005	Compact image capture assembly using multiple lenses and image sensors to provide an extended zoom	Labaziewicz, Parulski, Janson
140	7256823	8/14/2007	2/20/1997	Network configuration file for automatically transmitting images	Ward, Parulski, Allen
139	7236306	6/26/2007	2/18/2005	Digital camera using an express zooming mode to provide expedited operation over an extended zoom range	Janson, Parulski
138	7233684	6/19/2007	11/25/2002	Imaging method and system using affective information.	Fedorovskaya, Endikhovski, Matraszek, Parulski, Zacks, Taxier, Telek, Marino, Harel
137	7231359	6/12/2007	12/17/2004	Configuring image storage devices to enable imaging services	Parulski
136	7212229	5/1/2007	3/6/2001	Digital camera providing image processing for an attachable printer	Parulski, Small, Couwenhoven, VanBlargan, Wess
135	7210161	4/24/2007	2/20/1997	Automatically transmitting images from an electronic camera to a service provider using a network configuration	Ward, Parulski, Allen
134	7206136	4/17/2007	2/18/2005	Digital camera using multiple lenses and image sensors to provide an extended zoom range	Parulski, Janson, Labaziewicz
133	7171113	1/30/2007	11/22/2000	Digital camera for capturing images and selecting metadata to be associated with the captured images	Parulski, McCoy
132	7170552	1/30/2007	3/26/1998	Digital imaging system and file format for storage and selective transmission of processed and unprocessed image data	Parulski, Houchin
131	7158945	1/2/2007	11/30/2001	System and method for providing image products and/or services	Wolcott, McIntyre, Parulski
130	7158175	1/2/2007	11/30/2001	System including a digital camera and a docking unit for coupling to the internet	Belz, Chambers, Parulski
129	7146179	12/5/2006	10/24/2002	Portable imaging device employing geographic information to facilitate image access and viewing	Parulski, Schaeffer, Endsley
128	7136837	11/14/2006	5/10/2004	Providing a discounted payment schedule for utilizing and deleting stored images	Jackson, Parulski
127	7133597	11/7/2006	7/5/2001	Recording audio enabling software and images on a removable storage medium	Tingey, Gilman, Parulski
126	7127164	10/24/2006	6/27/2006	Method for rating images to facilitate image retrieval	Parulski, McCoy
125	7111317	9/19/2006	5/19/2000	Method for providing image goods and/or services to a customer	McIntyre, Willand, Brumlow, White, Parulski
124	7110025	9/19/2006	10/11/2000	Digital camera for capturing a sequence of full and reduced resolution digital images and storing motion and still digital image data	Loui, Parulski, Berarducci, Jackson, Joshi
123	7088396	8/8/2006	12/21/2001	System and camera for creating lenticular output from digital images	Fredlund, Parulski, Manico, Wess, Parker
122	7088388	8/8/2006	2/7/2002	Method and apparatus for calibrating a sensor for highlights and for processing highlights	MacLean, Morton, Parulski, Rodriguez
121	7057648	6/6/2006	3/29/2001	Capturing digital images to be trasferred to an service provider for storage	Parulski, Ward, Hopwood
120	7053953	5/30/2006	12/21/2001	Method and camera system for blurring portions of a verification image to show out of focus areas in a captured archival image	Belz, Adams, Parulski
119	7038714	5/2/2006	5/16/2000	Printing system and method having a digital printer that uses a digital camera image display	Parulski, Romano, Perry, Hadley
118	7035534	4/25/2006	6/16/2004	Photographic lightmeter-remote, system, and method	Shih, Noble, Parulski
117	7034880	4/25/2006	11/20/2000	System and camera for transferring digital images to a service provider	Endsley, Bryant, Fredlund, Parulski
116	7034871	4/25/2006	3/29/2001	Capturing digital images to be transferred to an e-mail address	Parulski, Ward, Hopwood
115	7027172	4/11/2006	8/15/2000	Color digital printer having a graphical user interface for displaying and selecting images for local and remote printing	Parulski, Romano

114	7024054	4/4/2006	9/27/2002	Method and system for generating a foreground mask for a composite image	Cahill, Parulski, Luo, Gindele
113	7024051	4/4/2006	12/8/2000	Customizing a digital imaging device using preferred images	Miller, Parulski
112	7019778	3/28/2006	4/14/2000	Customizing a digital camera	Prabhu, Miller, Akyuz, Wasula, Tintera, Parulski
111	7015955	3/21/2006	12/22/2000	Camera having verification display with viewer adaptation compensation for reference illuminants and method	Funston, Parulski
110	7003139	2/21/2006	2/19/2002	Method for using facial expression to determine affective information in an imaging system	Endrikhovski, Fedorovskaya, Matraszek, Parulski, Mir
109	6999111	2/14/2006	6/26/2001	Electronic camera and system for transmitting digital over a communication network	McIntyre, Parulski, Zacks
108	6989859	1/24/2006	12/22/2000	Camera having user interface ambient sensor viewer adaptation compensation and method	Parulski
107	6989221	1/24/2006		Photographic article	Wexler, Hall, Parulski
106	6985248	1/10/2006		Printing digital images using a print utilization file	Parulski, Ward, Hopwood
105	6950198	9/27/2005	10/18/2000	Effective transfer of images from a user to a service provider	Berarducci, Parulski, Fredlund
104	6947079	9/20/2005	12/22/2000	Camera having verification display with reverse white balanced viewer adaptation compensation and method	Parulski, Funston
103	6937997	8/30/2005	3/24/2000	Configuring and purchasing imaging devices	Parulski
102	6930718	8/16/2005	7/17/2001	Revised recapture camera and method	Parulski, Malloy-Desormeaux
101	6915273	7/5/2005	5/23/2000	Method for providing customized photo products over a network using images captured from a digital camera	Parulski
100	6909463	6/21/2005	12/22/2000	Camera having verification display and white-compensator and imaging method	Parulski
99	6903762	6/7/2005	12/13/2000	Customizing a digital camera for a plurality of users	Prabhu, Miller, Akyuz, Wasula, Tintera, Parulski
98	6890690	5/10/2005	3/14/2003	Photographic article	Wexler, Hall, Parulski
97	6885395	4/26/2005	9/7/2000	Selectively adjusting the resolution levels or the quality levels of digital images stored in a digital camera memory	Rabbani, Joshi, Parulski
96	6870567	3/22/2005	12/22/2000	Camera having user interface with verification display and color cast indicator	Funston, Parulski, Walker
95	6856427	2/15/2005	5/20/1999	System for printing correct exposure in a rendered digital image	Gilman, Parulski, Spaulding, Collette, Hamilton
94	6836617	12/28/2004	3/24/2000	Purchasing configured photographic film products	Parulski
93	6812962	11/2/2004	5/11/2000	System and apparatus for automatically forwarding digital images to a service provider	Fredlund, Simon, Cloutier, Parulski, Wess
92	6812961	11/2/2004	5/11/2000	System and camera for automatically forwarding digital images to a service provider	Parulski, Fredlund
91	6785423	8/31/2004	5/26/2000	Producing a compressed digital image organized into layers having information relating to different viewing conditions and resolutions	Joshi, Brower, Rabbani, Parulski
90	6784924	8/31/2004	1/7/1998	Network configuration file for automatically transmitting images from an electronic still camera	Ward, Parulski, Allen
89	6781713	8/24/2004	5/20/1999	Correcting exposure in a rendered digital image	Gilman, Parulski, Spaulding, Collette, Hamilton
88	6760485	7/6/2004	5/20/1999	Nonlinearly modifying a rendered digital image	Gilman, Parulski, Spaulding, Collette, Hamilton
87	6760128	7/6/2004	12/6/2000	Providing a payment schedule for utilizing stored images using a designated date	Jackson, Parulski
86	6731952	5/4/2004	12/29/2000	Mobile telephone system having a detachable camera / battery module	Schaeffer, Parulski, Schueckler
85	6714249	3/30/2004	12/31/1998	Producing panoramic digital images by digital camera systems	May, Parulski, Rinas, VanSprewenburg, Vermillion, Dunsmore.
84	6661454	12/9/2003	6/14/1999	Digital camera with memory card fullness icon	Hwang, Venturino, Lathrop, Parulski
83	6650366	11/18/2003	3/26/1998	Digital photography system using direct input to output pixel mapping and resizing	Parulski, Adams
82	6629104	9/30/2003	11/22/2000	Method for adding personalized metadata to a collection of digital images	Parulski, McCoy
81	6600510	7/29/2003	7/27/2000	Transmitting digital images to a plurality of selected receivers over a radio frequency link	Parulski, Schueckler
80	6573927	6/3/2003	11/24/1997	Electronic still camera for capturing digital image and creating a print order	Parulski, Ward, Hopwood.
79	6567119	5/20/2003	3/26/1998	Digital imaging system and file format for storage and selective transmission of processed and unprocessed image data	Parulski, Houchin
78	6539177	3/25/2003	7/17/2001	Warning message camera and method	Parulski
77	6516154	2/4/2003	7/17/2001	Image revising camera and method	Parulski, Cannon, Malloy Desormeaux
76	6400908	6/4/2002	3/6/2000	Camera and photography system with multiple, encoded area modes and modification states	Parulski
75	6389159	5/14/2002	1/12/2001	Method for producing prints from digital image files scanned from film	Gilman, Chang, Parulski, Pink.
74	6366316	4/2/2002	1/11/1999	Electronic imaging system for generating a composite image using the difference of two images	Parulski, Luo, Gindele

73	6310647	10/30/2001	2/24/1998	Image format for storing digital images and including multiple application segments	Parulski, Ward, Lathrop, Houchin, Jennings, Vansprewenburg
72	6292219	9/18/2001	3/18/1997	Motion processing system using an effects-enhanced motion storage medium	Fredlund, Parulski.
71	6292218	9/18/2001	7/16/1997	Electronic camera for initiating capture of still images while previewing motion images	Parulski, Tredwell
70	6208770	3/27/2001	9/18/1998	Digital colored corrected prints produced from colored film	Gilman, Chang, Parulski, Pink.
69	6122526	9/19/2000	1/19/1999	Cellular telephone and electronic camera system with programmable transmission capability	Parulski, Schueckler
68	6097901	8/1/2000	9/18/1998	Camera having locator for image modification areas	Parulski
67	6072962	6/6/2000	9/18/1998	Camera and photography system with multiple, encoded area modes and modification states	Parulski
66	6070013	5/30/2000	9/18/1998	Transmogrifying photography systems, film packages, and cameras	Cosgrove, Parulski
65	5983229	11/9/1999	6/5/1997	Extension persistence mechanism for a digital image format	Houchin, Couwenhoven, Parulski
64	5943603	8/24/1999	4/24/1997	Electronic camera system with programmable transmission capability	Parulski, Schueckler
63	5914748	6/22/1999	8/30/1996	Method and apparatus for generating a composite image using the difference of two images	Parulski, Luo, Gindele
62	5900909	5/4/1999	7/17/1997	Electronic still camera having automatic orientation sensing and image correction	Parulski, Severin, Ohmori, Izumi, Mizukoshi
61	5874994	2/23/1999	12/11/1995	Filter employing arithmetic operations for an electronic sychronized digital camera	Xie, Parulski.
60	5859927	1/12/1999	5/13/1997	Method and system for the reduction of memory capacity required for a digital representation of an image	Adams, Spaulding, Parulski.
59	5841471	11/24/1998	9/12/1996	Timing control for a digitally interfaced camera using variable line readout intervals	Endsley, Berarducci, Parulski
58	5828406	10/27/1998	12/30/1994	Electronic camera having a processor for mapping image pixel signals into color display pixels	Parulski, Tredwell
57	5708729	1/13/1998	4/12/1995	Method and system for the reduction of memory capacity required for digital representation of an image	Adams, Spaulding, Parulski.
56	5696850	12/9/1997	12/21/1995	Automatic image sharpening in an electronic imaging system	Parulski, Axman
55	5682562	10/28/1997	5/16/1996	Digitally controlled quench flash circuit	Mizukoshi, Izumi, Lynch, Uebelacker, Parulski, Dunsmore
54	5668597	9/16/1997	12/30/1994	Electronic camera with rapid automatic focus of an image upon a progressive scan image sensor	Parulski, Izumi, Mizukoshi
53	5666159	9/9/1997	4/24/1995	Electronic camera system with programmable transmission capability	Parulski, Schueckler
52	5633678	5/27/1997	12/20/1995	Electronic still camera for capturing and categorizing images	Parulski, Napoli, Lewis
51	5610654	3/11/1997	3/6/1996	Automatic camera exposure control using variable exposure index CCD sensor	Parulski, McGarvey.
50	5595389	1/21/1997	12/30/1993	Method and apparatus for producing personalized" video games using CD discs"	Parulski, Baumeister, Ellson
49	5563658	10/8/1996	12/16/1994	Electronic camera with rapid automatic focus of an image upon an image sensor	Parulski, Lathrop
48	5555098	9/10/1996	4/26/1994	Method and apparatus for providing multiple programmed audio/still image presentations from a digital disc image player	Parulski
47	5523786	6/4/1996	12/22/1993	Color sequential camera in which chrominance components are captured at a lower temporal rate than luminance components	Parulski
46	5519452	5/21/1996	6/17/1994	Mechanism for improving television display of still images using image motion-dependent filter	Parulski
45	5506617	4/9/1996	12/10/1992	Electronic camera incorporating a computer-compatible bus interface	Parulski, Bouvy, Smith, Acello
44	5493335	2/20/1996	6/30/1993	Single sensor color camera with user selectable image record size	Parulski, Vogel, Ohmori
43	5477264	12/19/1995	3/29/1994	Electronic imaging system using a removable software-enhanced storage device	Sarbadhikari, Fredlund, Parulski.
42	5475441	12/12/1995	12/10/1992	Electronic camera with memory card interface to a computer	Parulski, Bouvy, Tredwell, Smith
41	5475428	12/12/1995	9/9/1993	Method for processing color image records subject to misregistration	Hintz, Hibbard, Parulski.
40	5453840	9/26/1995	1/27/1994	Cross correlation image sensor alignment system	Parker, Parulski
39	5440401	8/8/1995	9/14/1990	Image database incorporating low resolution index image data	Parulski, Kristy, O'Brien, Donald E.
38	5440343	8/8/1995	2/28/1994	Motion/still electronic image sensing apparatus	Parulski, Stevens, Hibbard
37	5428456	6/27/1995	3/15/1991	Method and apparatus for adaptively reducing interline flicker of TV-displayed image	Parulski, Axman
36	5414811	5/9/1995	2/25/1994	Method and apparatus for controlling rapid display of multiple images from a digital image database	Parulski, Funston.
35	5410415	4/25/1995	9/30/1993	Recorded digital image presentation control files	Parulski, Brownstein, Caine, Axman.

34	5406325	4/11/1995	7/6/1992	Method and apparatus for forming a source-independent image data metric from second generation photographic films	Parulski, Johnson, Bellis.
33	5402170	3/28/1995	8/31/1992	Hand-manipulated electronic camera tethered to a personal computer	Parulski, Hamel, Acello.
32	5355178	10/11/1994	10/24/1991	Mechanism for improving television display of still images using image motion-dependent filter	Parulski
31	5301244	4/5/1994	7/15/1993	Computer input scanner incorporating multiple scanning modes	Parulski
30	5295204	3/15/1994	7/18/1991	Method for color balancing a computer input scanner incorporating multiple scanning modes	Parulski
29	5285237	2/8/1994	9/16/1991	Photoprint retaining platen for digitizing image scanner	Parulski, Manley, Reddig
28	5270839	12/14/1993	9/16/1991	Dual imaging station photoprint scanner	Parulski, Smith, Manley, Bilson
27	5270831	12/14/1993	9/14/1990	Storage and playback of digitized images in digital database together with presentation control file to define image orientation/aspect ratio	Parulski, Brownstein, Caine, Axman.
26	5251021	10/5/1993	8/5/1992	Color sequential scanner incorporating a synchronized variable exposure shutter	Parulski, Geisbuesch, Rutter.
25	5251019	10/5/1993	7/24/1992	Solid state color image sensor using a field-staggered color filter pattern	Moorman, Hibbard, Parulski
24	5250948	10/5/1993	12/19/1991	High level resolution enhancement for dual-range A/D conversion	Berstein, Parulski
23	5241659	8/31/1993	9/14/1990	Auxiliary removable memory for storing image parameter data	Parulski, O'Brien, Funston.
22	5218459	6/8/1993	9/16/1991	Print scanner with soft key variable magnification	Parulski, Cochrane, Rutter.
21	5189511	2/23/1993	3/19/1990	Method and apparatus for improving the color rendition of hardcopy images from electronic cameras	Parulski, Bellis, Jr., Hibbard, Giorgianni, McInerney
20	5177698	1/5/1993	6/5/1992	Selectable power of two coefficient signal combining circuit	Parulski
19	5173789	12/22/1992	7/18/1991	Image scanner incorporating manually operable magnification and brightness control	Renner, Shelley, Parulski
18	5161006	12/3/1992	7/26/1990	Method for separating chrominance and luminance components of a television signal	Monta, Lim, Parulski
17	5138454	8/11/1992	9/16/1991	Megapixel video previewer framestore and display	Parulski
16	5109273	4/28/1992	5/11/1990	Signal processing circuit for performing a pipelined matrix multiplication upon signals from several linear sensors	Parulski, Cook, D'Luna
15	5101269	3/31/1992	9/18/1990	Stereoscopic electronic slide and print viewer	Shelley, Parulski
14	5086344	2/4/1992	5/11/1990	Digital correlated double sampling circuit for sampling the output of an image sensor	D'Luna, Cook, Parulski
13	5086343	2/4/1992	5/11/1990	Method and apparatus for compensating for sensitivity variations in the output of a solid state image sensor	Cook, Parulski, D'Luna
12	5065229	11/12/1991	9/27/1990	Compression method and apparatus for single-sensor color imaging systems	Tsai, Parulski, Rabbani
11	5053861	10/1/1991	7/24/1989	Compression method and apparatus for single-sensor color imaging systems	Tsai, Parulski, Rabbani
10	5047861	9/10/1991	7/31/1990	Method and apparatus for pixel non-uniformity correction	Houchin, Parulski
9	5040068	8/13/1991	12/28/1989	Electronic imaging apparatus with interchangeable pickup units	Parulski, Moorman
8	5025313	6/18/1991	10/16/1989	System for minimizing optical distortions and chromatic aberrations in a linear color scanner	Parulski, Kessler
7	5008739	4/16/1991	2/13/1989	Real-time digital processor for producing full resolution color signals from a multi-color image sensor	D'Luna, Hibbard, Parulski
6	5001663	3/19/1991	5/3/1989	Programmable digital circuit for performing a matrix multiplication	Parulski, Hibbard, D'Luna
5	4994901	2/19/1991	12/23/1988	Method and apparatus for increasing the gamut of an additive display driven from a digital source	Parulski, Bellis
4	4967264	10/30/1990	5/30/1989	Color sequential optical offset image sampling system	Parulski, Nutting, Moore
3	4962419	10/9/1990	2/13/1989	Detail processing method and apparatus providing uniform processing of horizontal and vertical detail components	Hibbard, Parulski, D'Luna
2	4896207	1/23/1990	6/17/1988	Color imaging apparatus employing a horizontal stripe color filter to reduce rise-time artifacts	Parulski
1	4876590	10/24/1989	6/17/1988	Low resolution verifier for a still video image	Parulski

Kenneth Parulski

List of trial testimony, IPR declarations and depositions – June 2024

Snap, Inc. v. Uberfan Ltd. In March - April 2022, I submitted four expert declarations in support of petitions from Snap, Inc. for *Inter Partes* Review of U.S. Patent No. 9,727,634, U.S. Patent No. 9,477,744, U.S. Patent No. 10,740,305, and U.S. Patent No. 10,963,439, filed by Daniel Yannuzzi of Sheppard Mullin. In September 2022, the parties agreed to a settlement.

Xerox v. Mountain Peak Ventures. In December 2021, I submitted an expert declaration in support of a petition from Xerox Corp. for *Ex Partes* Review of U.S. Patent No. 7,684,090, filed by Denis Sullivan of Barclay Damon Tower. In May 2021, the parties agreed to a settlement.

Snap, Inc. v. Sanderling Management Ltd. In April 2021, I submitted three expert declarations in support of petitions from Snap, Inc. for *Inter Partes* Review of U.S. Patent No. 9,355,412, U.S. Patent No. 9,639,866, and U.S. Patent No. 10,108,986, filed by Daniel Yannuzzi of Sheppard Mullin. On February 3-4, 2022, I was deposed by counsel for Sanderling Management Ltd. concerning these expert reports.

In May 2022, I submitted three additional expert declarations in support of Snap's replies to the Patent Owner's responses for these three IPRs. On June 29, 2022, I was deposed by counsel for Sanderling Management Ltd. concerning these expert reports. On October 31, 2022, Final Written Decisions were issued which determined that all of the challenged claims of each of these three patents were unpatentable.

Samsung Electronics Co., Ltd. v. Imperium IP Holdings, Ltd. On December 18, 2020, I submitted an expert report on behalf of Plaintiff Samsung Electronics Co., Ltd., regarding certain Samsung products, as well as Imperium's assertions of infringement in litigation in the Eastern District of Texas and in a complaint brought before the International Trade Commission. On February 17, 2021, I submitted a supplemental expert report on behalf of Samsung in this matter. On February 19, 2021, I was deposed by Imperium's counsel concerning these expert reports. In June 2021, the parties agreed to a settlement.

Snap, Inc. v. Pixmark IP LLC. In November 2020, I submitted an expert declaration in support of a petition from Snap, Inc. for *Inter Partes* Review of U.S. Patent No. 9,477,689, U.S. Patent No. 9,792,662, U.S. Patent No. 10,102,601, and U.S. Patent No. 10,489,873, filed by Daniel Yannuzzi of Sheppard Mullin. In December 2020, the parties agreed to a settlement.

Samsung v. Yu et al. In January 2020, I submitted an expert declaration in support of a petition from Samsung for *Inter Partes* Review of U.S. Patent No. 6,611,289, filed by Scott Taylor of Ropes & Gray. In August 2020, this petition was joined with an earlier petition filed by Apple Inc. On January 5, 2021, a Final Written Decision was issued which determined that four of the five challenged claims were unpatentable.

U.S. Philips Corporation v. HTC Northern District of California, Case No. 4:18-cv-01887-HSG. In April 2019, I submitted an Invalidity Expert Report and in June 2019, I submitted a Rebuttal Expert Report regarding U.S. Patent No. 5,910,797 on behalf of HTC Corporation. On July 25, 2019, I was deposed by Robert Pickens of Venable Fitzpatrick, counsel for U.S. Philips Corp., concerning my expert reports, and was defended by Kevin Patariu of Perkins Coie. In December 2019, the parties agreed to a settlement.

Qualcomm Apple Litigation Southern District of California, Case Nos. 3:17-cv-00108-GPC-MMD and 3:17-cv-01010-GPC-MMD**.** In June 2018, I submitted an Expert Report regarding nineteen exemplary patents in Qualcomm's patent portfolio. On October 30, 2018, I was deposed by Michael Anon of Fish & Richardson, counsel for Apple Inc., concerning my expert report, and defended by Nathan Hamstra of Quinn Emanuel. In April 2019, the parties agreed to a settlement.

Olympus v. Maxell. In June 2018, I submitted an expert declaration in support of four petitions from Olympus Corporation filed by William McCabe and Matthew Moffa of Perkins Coie, for *Inter Partes* Reviews of U.S. Patent No. 8,059,177, U.S. Patent No. 8,339,493, and U.S. Patent No. 9,100,604. In December 2018, the parties agreed to a settlement.

HTC v. U.S. Philips. In February 2017, I submitted an expert declaration in support of a petition from HTC Corporation filed by Bing Ai and Kevin Patariu of Perkins Coie, for *Inter Partes* Review of U.S. Patent No. 5,910,797, owned by U.S. Philips Corporation. The IPR was not instituted, because the board was unable to determine the scope and meaning of one of the terms used in the independent claims.

Samsung v. Imperium IP Holdings. In May 2015, I submitted an expert declaration in support of a petition from Samsung Electronics Co. for *Inter Partes* Review of U.S. Patent No. 7,029,029, owned by Imperium IP Holdings. In December 2015, the Patent Trial and Appeal Board instituted an *Inter Partes* Review of this patent. On March 4, 2016, I was deposed by counsel for Imperium IP Holdings concerning my first declaration and was defended by Samuel Brenner of Ropes & Gray.

In June 2016, I submitted a second expert declaration in support of the petition. On July 12, 2016, I was deposed by counsel for Imperium IP Holdings concerning my second declaration. In their Final Written Decision issued in December 2016, the PTAB ordered that all of the challenged claims were obvious and unpatentable. In its decision on Jan. 31, 2019, the US Court of Appeals for the Federal Circuit affirmed the Boards determination that the challenged claims were unpatentable and reversed the judgement of liability in case 4:14-cv-00371.

Imperium IP Holdings v. Samsung. Eastern District of Texas, Sherman Division, Case 4:14-cv-00371. In September 2015, I submitted an Invalidity Expert Report and a Rebuttal Expert Report for U.S. Patent No. 7,029,029. On October 29, 2015, I was deposed by counsel for Imperium IP Holdings concerning these two expert reports.

From Feb. 3-4, 2016, I testified at trial in Sherman, Texas on behalf of Samsung as an expert witness on digital cameras for U.S. Patent No. 7,029,029. My direct examination was by Samuel Brenner of Ropes & Gray and my cross examination was by R. William Sigler of Fisch Sigler.

Google Inc. v. TLI Communications LLC. In November 2014, I submitted an expert declaration in support of a petition from Google Inc. for *Inter Partes* Review of U.S. Patent No. 6,038,295, owned by TLI Communications, LLC. In June 2015, the Patent Trial and Appeal Board instituted an *Inter Partes* Review of this patent.

On July 28, 2015, I was deposed by Tarek Fahmi of Ascenda Law Group, counsel for TLI Communications LLC, concerning my declaration and was defended by Andrew Trask of Williams and Connolly. The parties subsequently agreed to a settlement.

HTC and Samsung Electronics v. E-Watch. In June 2014, I submitted expert declarations in support of two petitions from HTC Corporation and HTC America, Inc., filed by Perkins Coie, for *Inter Partes* Reviews of U.S. Patent No. 7,643,168 and U.S. Patent No. 7,365,871, owned by E-Watch, Inc. In December 2014, the Patent Trial and Appeal Board instituted an *Inter Partes* Review of each of these

patents. In February 2015, these two IPRs were joined with IPR petitions filed by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.

In April 2015, I submitted two additional expert declarations to address issues raised in the Patent Owner's responses for these two *Inter Partes* Reviews. On May 21, 2015, I was deposed by counsel for E-Watch concerning my declarations. The parties subsequently agreed to a settlement.

HTC v. Flashpoint Technology, Inc. In June 2014, I submitted three expert declarations in support of petitions from HTC Corporation and HTC America, Inc., filed by Perkins Coie, for *Inter Partes* Reviews of U.S. Patent No. 5,943,093, U.S. Patent No. 5,986,701, and U.S. Patent No. 5,812,736, owned by Flashpoint Technology, Inc. In December 2014, the Patent Trial and Appeal Board instituted an *Inter Partes* Review of each of these patents. The parties subsequently agreed to a settlement.

Apple v. Samsung. Northern District of California, San Jose Division, Case 5:12-cv-00630-LHK. In August 2013, I submitted an Expert Report regarding Infringement of U.S. Patent No. 6,226,449 by certain Apple iPhone and iPod products. In September 2013, I submitted a Rebuttal Expert Report regarding the validity of U.S. Patent No. 6,226,449. I was deposed in July 2013 as fact witness regarding my prior art patent, US 5,633,678 and in September 2013 regarding my expert reports. I was defended by Carlos Rodriquez of Quinn Emanuel.

From April 21-22, 2014, I testified at trial on behalf of Samsung as an expert witness on digital cameras for U.S. Patent No. 6,226,449. My direct examination was by Kevin Johnson of Quinn Emanuel and my cross examination was by Bill Lee of Wilmer Hale. The jury found that all of the accused Apple products infringed Samsung's '449 patent and awarded the damages that Samsung had requested. In February 2016, this judgment of infringement was affirmed by the U.S. Court of Appeals for the Federal Circuit.

Eastman Kodak Company v. Ricoh Company, Ltd. New York Southern District, Case 1:2012cv03109. I was deposed as a fact witness in April 2013 and defended by Dan Esrick of Wilmer Hale.

International Trade Commission: 337-TA-831 Electronic Devices for Capturing and Transmitting Images, and Components Thereof**.** Eastman Kodak Company v. Apple Inc., Cupertino, CA; High Tech Computer Corp. a/k/a HTC Corp., Taiwan; HTC America, Inc., Bellevue, WA; Exedea, Inc., Houston, TX, filed January 10, 2012.

I was deposed in September 2012 as fact witness, including as a named inventor on the patents-in-suit: U.S. Patent Nos. 7,210,161; 7,742,084; 7,453,605; 7,936,391 and 6,292,218. I was defended by Laura Beth Miller of Brinks Hofer Gilson & Lione.

Eastman Kodak Company v. Kyocera Corporation. New York Western District, Case 6:2010cv06334. I was deposed in November 2011 as a fact witness and 30(b)(6) witness for Eastman Kodak Company and was defended by Michael Summersgill of Wilmer Hale.

Eastman Kodak Company v. Apple Inc. New York Western District. Case 6:2010cv06022**.** I was deposed in June 2011 as fact witness and 30(b)(6) witness for Eastman Kodak Company and was defended by Michael Abernathy of K&L Gates.

International Trade Commission: 337-TA-703 Mobile Telephones and Wireless Communication Devices Featuring Digital Cameras, and Components Thereof**.** Eastman Kodak Company v Research In Motion, Ltd., Canada; Research In Motion Corporation, Irving TX; Apple Inc. Cupertino, CA

I was deposed in summer 2010 as fact witness for Eastman Kodak Company, including as a named inventor of the patent-in-suit: U.S. Patent No. 6,292,218. I testified at the ITC hearing in September 2010. My direct examination was by Mike Abernathy of K&L Gates and my cross-examination was by Matthew Powers of Weil, Gotshal & Manges.

Research in Motion Ltd. et al. v. Eastman Kodak Co. Texas Northern District, Case 3:08cv02075. I was deposed in summer 2009 as fact witness for Eastman Kodak Company, including as a named inventor of the patents-in-suit: U.S. Patent Nos. 5,493,335; US 6,292,218; and US 6,600,510. I was defended by Mark Supko of Crowell & Moring.

International Trade Commission: 337-TA-663 Mobile Telephones and Wireless Communication Devices Featuring Digital Cameras, Components Thereof. Eastman Kodak Company v Samsung Electronics Company, Ltd., Korea; Samsung Electronics America, Inc., Samsung Telecommunications America, LG Electronics, Inc., Korea; LG Electronics USA, Inc., LG Electronics MobileComm USA, Inc

I was deposed in summer 2009 as fact witness for Eastman Kodak Company, including as a named inventor of the two patents-in-suit: U.S. Patent Nos. 5,493,335 and US 6,292,218. I testified at the ITC

hearing in fall 2009. My direct examination was by James Quarles of Wilmer Hale and my cross-examination was by Matthew Powers of Weil, Gotshal & Manges.

DR Systems, Inc. v. Eastman Kodak Company California Southern District**,** Case 3:2008cv00669**.** I was deposed in summer 2008 as a fact witness for Eastman Kodak Company, including as a named inventor of the patent-in-suit: U.S. Patent No. 5,414,811. I was defended by Stephen Hankins of Schiff Hardin.