

Forrest Sass, Senior Electronic Engineer

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925-462-5280
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Professional Summary

Mr. Sass has over 40 years' experience in the Silicon Valley with power electronics and connector companies. He has in-depth knowledge of electrical connectors, power supplies and analog electronics.

Mr. Sass' experience also includes researching, creating and submitting patents for various products including low inductance cables and

connectors, and is the co-inventor of "Method and system for detecting leakage in fluid distribution networks."

Mr. Sass has published over 50 technical articles and documents including 3 papers presented to the Institute of Electrical and Electronics Engineers (IEEE). Mr. Sass is a senior member of the IEEE.

Expertise

- Electrical connectors
- Switching and linear power supplies
- Power and signal cables
- Contactors and switches
- Power systems

Education

Year	College or University	Degree
1976	California Polytechnic State University, San Luis Obispo, CA	B.S., Electrical Engineering <ul style="list-style-type: none">▪ Graduated with Honors

Professional Experience

From:	1993
To:	Present
Organization:	Theorem; Pleasanton, CA
Title:	Consultant
Summary:	<ul style="list-style-type: none">▪ Developed special low-inductance power cable for next-generation personnel carrier, General Dynamics Land Systems, Tallahassee, FL.▪ Developed next-generation high current low-inductance connector for Elcon (now TE Connectivity) Fremont, CA intended for use with Intel's new Itanium 64-bit processor.▪ Connector Industry expert contributed electrical connector section for StatPEP (Status of Electronic Packaging) report commissioned by Power Sources Manufacturer's Association.

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- Served as VP of Cableco Technologies (now Methode) which designed and fabricated custom power and signal cables. Designed IBM AS400 mainframe computer custom cable tester.
 - Evaluated a new patent-pending connector product to UL1950 safety standards and served as liaison between Cableco (now Methode) and UL, Cableco Technologies, Dublin, CA.
 - Co-developed a 3MW switch used in the utility power conversion and distribution industry.
 - Designed and developed a 30KV constant current switching power supply for neon signs
 - Designed 20W compact auxiliary power converter for IBM power supply, Fuji Hi Tech, Fremont, CA.
 - Designed 750W modular power supply using custom ac/dc front end and telecom “brick” converters. Digital Power, Fremont, CA.
 - Analyzed and determined failure mechanism of 160KV X-ray power supply and suggest fixes
 - Wrote article on forward vs. flyback converter tradeoffs, Phihong USA, Fremont CA.
 - Developed a test system for 100KVA 3 converters.
 - Designed 3KW load for field testing a microwave power supply, InVision, Fremont, CA.
 - Designed a production power supply controller for Auspex, Santa Clara, CA.
 - Confirmed that catheters made by Cardima (Fremont, CA) met ANSI/AAMI HF18:2001 medical standards.
 - Analyzed dc/dc converter product line, wrote two white papers, Celestica, Milwaukie, OR.
 - Designed power supply remote data acquisition system, Digital Power, Guadalajara, MX.
 - Established a partnership between Cableco Technologies (now Methode) and Digital Power to procure and use an environmental test chamber. Responsible for the selection, recommendation, purchase, set up and operation of a computer-controlled heat/cool chamber.
 - Calculated Mean Time between Failure (MTBF) based on MIL STD 217F, parts count method for products.
 - Calculated Mean Time between Failure (MTBF) based on Bellcore, parts stress method for products.
 - Served as ISO9000 program manager to establish and document company engineering procedures, Digital Power, Fremont, CA
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From: 1992
To: 1993
Organization: EPS; Fremont, CA
Title: Co-Founder and VP of Engineering
Summary: Designed, prototyped and developed a high voltage power supply for neon signs using high frequency switching technology to replace conventional line transformers. The power supply output was adapted to the unique voltage and current requirements of neon tubes, and would shut off if inadvertently touched by a person.

From: 1984
To: 1992
Organization: Computer Products (now Emerson Electric); Fremont, CA
Title: Applications Engineering Manager
Summary:

- Provided expert answers to customer's technical questions, wrote and published application notes, datasheets, support documentation and sales literature.
- Managed a four-person team, gave technical seminars and provided second level support to customers.

From: 1980
To: 1984
Organization: Pulse Engineering; San Diego, CA
Title: Development Engineer
Summary: Designed power magnetic devices to meet customer specifications, internal design standards, and international safety requirements. Proposed new products: Orthogonal field mag amp, magnetically-coupled voltage regulator, dual input current sense transformer.

Litigation Support Experience

Expert Engagement:

Type of Matter: Patent infringement
Law Firm: Tiajolloff & Kelly LLP
Case Name: Platinum -Simply45
Services Provided: Engaged as expert
Disposition: (Currently engaged) Pending

Expert Engagement:

Type of Matter: Class action
Law Firm: Migliaccio & Rathod LLP, Gustafson Gluek PLLC and Taus, Cebulash, & Landau LLP
Case Name: Glisairo v. Lenovo (United States) Inc., No. 19-cv-2727 (D. Minn.)
Mackay v. Lenovo (United States) Inc., No. 20-cv-01149 (D. Del.)
Services Provided: Engaged as expert
Disposition: (Currently engaged) Pending

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Expert Engagement:

Type of Matter:	Class action
Law Firm:	Migliaccio & Rathod LLP
Case Name:	Joseph Carlotti v ASUS Computer International (North America) Inc.
Services Provided:	Engaged as engineering consultant
Disposition:	Pending

Expert Engagement:

Type of Matter:	Patent infringement
Law Firm:	Tucker Ellis LLP
Case Name:	Light Sources, Inc. v First Light Technologies, Inc.
Services Provided:	Engaged as Expert
Disposition:	Settled

Expert Engagement:

Type of Matter:	Patent infringement
Law Firm:	Gardere Wynne Sewell LLP
Case Name:	Traxxas v Hobby King
Services Provided:	Engaged as Expert
Disposition:	Settled

Expert Engagement:

Type of Matter:	Patent infringement
Law Firm:	O'Melveny & Myers LLP
Case Name:	Hitachi-Maxell v. TPV
Services Provided:	Engaged as Consultant
Disposition:	Won

Expert Engagement:

Type of Matter:	Failure analysis, 160KV X-ray power source
Law Firm:	(n/a)
Case Name:	(n/a)
Services Provided:	Engaged as Consultant
Disposition:	Problem identified and resolved

Expert Engagement:

Type of Matter:	Patent infringement
Law Firm:	O'Melveny & Myers LLP
Case Name:	Hitachi-Maxell v. TPV
Services Provided:	Engaged as Consultant
Disposition:	Won

Expert Engagement:

Type of Matter:	Class action
Law Firm:	Whitfield, Bryson & Mason, LLP and Ram, Olson, Gereghino & Koppczynski, LLP

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Case Name:	Class v. Apple
Services Provided:	Engaged as Expert
Disposition:	Settled

Expert Engagement:

Type of Matter:	Patent infringement
Law Firm:	O'Melveny & Myers LLP
Case Name:	FAURC v. TPV
Services Provided:	Engaged as Expert
Disposition:	Won

Expert Engagement:

Type of Matter:	Database investigation
Law Firm:	(n/a)
Case Name:	BSG vs CTI
Services Provided:	Consultant to Expert, built forensic database infrastructure
Disposition:	Settled

Professional Affiliations, Achievements & Awards

- Senior member, IEEE (Institute of Electrical and Electronics Engineers)
- Past member, PSMA (Power Sources Manufacturers' Association)
- Chapter President, Tau Beta Pi, National Engineering Honor Society
- Chapter Vice President, Blue Key National Honor Fraternity
- Member, IEEE Power Electronics Society
- Patent application US2002/0123253 A1, Low Inductance Connector
- Patent application US 2004/0154829 A1, Low Inductance High Capacitance Power Cable for Connecting a Power Supply to an Electrical Load
- Co-inventor, Method and System for Detecting Leakage in Fluid Distribution Networks (US 10,732,068 B2)

Publications

1. Sass, Forrest, "PowerBud: A New Technology for High Current, Low Insertion Force, Low Resistance and Long Cycle Life Power Connectors" white paper written for Methode Electronics Power Solutions Group, May 2011.
2. Sass, Forrest, "How Lasers are Changing Photovoltaic Manufacturing" white paper written for Messe München, Laser World of Photonics Trade Fair, May 2011.
3. Sass, Forrest, "The Profound Changes Affecting the Worldwide Automotive Electronics Market" white paper written for Messe München. Electronica Trade Fair, November 2010.
4. Sass, Forrest, "DC Power in the Data Center: Both Lean and Green" presented at AFCOM Data Center World, Las Vegas, NV October 2010.

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5. Sass, Forrest, "A New Class of Power Connector" Power Systems Design magazine, March 2010.
6. Sass, Forrest, "A New Approach to Bus Bar Design Yields Significant Design Advantages" white paper written for Methode Electronics Power Solutions Group, November 2009.
7. Sass, Forrest, "The Worldwide Photovoltaic Market – a Bright Spot in a Dark World Economy" white paper written for Messe München. Productronica Trade Fair, November 2009.
8. Sass, Forrest, "The Promise of Organic Electronics – Previously-Unimaginable Innovative Products" white paper written for Messe München. Productronica Trade Fair, November 2009.
9. Sass, Forrest, "Termination Options for High-Current Cables" Electronic Products, Summer 2002, bylined by Keith Carver, VP Engineering of Cableco Technologies, Dublin, CA.
10. Sass, Forrest, "Replacing Telecom 'Bricks' with Celestica Verticon DC/DC Converters" white paper written for Celestica Corporation, Milwaukie, OR, April 2002.
11. Sass, Forrest, "Buying Modular DC/DC Power Converters v. Designing 'Cookbook' On-Board Converters – Making the Best Design Choice" white paper written for Celestica Corporation, Milwaukie, OR, April 2002.
12. Sass, Forrest, "Advances in Power Connector Technology" paper presented at IEEE- APEC 2001, Anaheim, CA, February 2001.
13. Sass, Forrest, "Status of Power Electronic Packaging" published manual, committee member and contributing author, subject: power connectors, published by PSMA (Power Sources Manufacturer's Association), January 2000.
14. Sass, Forrest, "Desktop Adapters Meet Miniature Product Needs" Electronic Products Spring 2000 supplement, bylined by Michael O'Conner, VP Engineering, Phihong USA, Fremont, CA.
15. Sass, Forrest, "Power Supply Engineering Handbook" published by Computer Products Power Conversion (writer and editor).
16. Sass, Forrest, "Marketing Power Conversion Products on the Internet" IEEE, presented paper at the APEC 1999 conference in Dallas, TX.
17. Sass, Forrest, "Power Trends: A Glimpse into the Future of High Density Power Converters" EDN Products Edition, January 17, 1994 bylined by Claude Adkins, VP Engineering, Digital Power.
18. Sass, Forrest, "High Frequency Switchers Take Aim at Commercial Applications" Canadian Electronics, November 1991.
19. Sass, Forrest, "Switching Power at Zero Voltage" Electronic Engineering Times, August 19, 1991.
20. Sass, Forrest, "Universal Input adds Flexibility to Switching Supplies" Electronic Products Magazine, March 1990.
21. Sass, Forrest, "Specifying Switching Power Supplies: The System Designer's Checklist" presented at Systems/USA conference, February 1990.
22. Sass, Forrest, "High Power Switchers Specification Guidelines" OEM Power Supplies Today, a supplement to Electronic Buyer's News, July 29, 1985.
23. Sass, Forrest, "Keep Cool and Live Longer" Electronic Products Magazine, March 1980.
24. Sass, Forrest, "Simplifying Dissipative Regulator Design with a New Ultra-wide- Range Monolithic IC" paper presented at Powercon 3, June 1976.
25. Sass, Forrest, "Little Low Cost Mono's Make High Class Regulators" Electronic Products Magazine, December 1975.