

MICHAEL J. MARENTIC

EDUCATION: M.S. Degree - Electrical Engineering, University of Illinois
Thesis: Electron Density Measurements of an AC Plasma Panel Using Laser Interferometry.

B.S. Degree - Engineering Physics, University of Illinois

ORGANIZATIONS AND ACHIEVEMENTS: Multiple Excellence Awards at QinetiQ
Testifying Expert Witness
President's Award at Hitachi America
Chairman VESA Board of Directors in 1997
Interstate Electronics Special Achievement Awards
Member of Society for Information Display since 1977

CAREER SUMMARY: Extensive industrial and theoretical experience in product engineering, system engineering, display electronics design, and device fabrication. Support various infrastructure groups with technology evaluations during acquisitions and equity position investment. Supported customers with application engineering and marketing with technical reports and assessments.

EXPERIENCE:

2002 – 2011 QINETIQ NORTH AMERICA – TECHNOLOGY SOLUTIONS GROUP
Company: Provider of innovative and cost-effective hardware solutions to US Government agencies. 600 employees

Principal Electronic Engineer for underwater submarine to aircraft laser communications; System and lead engineer for airborne multi-spectral imaging payload used for detection of land mine fields; Lead electrical and system engineer for medical device used for cervical cancer detection and treatment.

2001 – 2002 ALIEN TECHNOLOGY, Morgan Hill, California
Company: Start-up with unique low cost silicon packaging technology; 110 employees

Senior System Developer in IC Design team. Developed innovative LCD driver architecture for very low cost, mechanically flexible, ultra low power LCD. Member of IC design team that designed first Nanoblock, modular OLED display driver. Member of team that designed and manufactured first class 1, UHF, EPC Global protocol, passive RFID tag and reader.

1999 – 2001 PHILIPS COMPONENTS, Sunnyvale, California
Company: Multi-national component manufacturing conglomerate; 50,000 employees

Director of Engineering for new product creation business group. Projects include Video monitor design, large LCD TV, optical backlighting, and human interfaces. Project timing was several months from concept to working prototypes. Designs were documented and handed off to pertinent factory for volume manufacture. Member of team that performed due diligence for acquisition of LG LCD. Technical consultant to market development, venture capital investment, and CTO organizations.

SHARP EXHIBIT 1011

Sharp Corp., et al. v. Surpass Tech Innovation LLC

IPR2015-00021

- 1995 - 1999 HITACHI ELECTRONIC DEVICES (USA), INC., San Jose, California
Company: Sales and manufacturing subsidiary of Japanese conglomerate; 1,200 employees
- Manager of small design group for flat panel monitors. Projects included LVDS, TMDS digital and analog video interfaces for LCD notebooks and monitors. Liaison office between three Japanese LCD design departments and various partnered Silicon Valley companies.
Very active in Video Electronics Standards Association as chairman of Flat Panel Display Interface working group.
Wrote quarterly market and technical position report on video chips for LCD's.
- 1993 - 1995 SCIENCE APPLICATIONS INTERNATIONAL CORPORATION, San Diego, California
Company: Employee owned, technical services provider; 17,000 employees
- Principal Engineer responsible for transfer of LCD backlight from prototype fabrication to high yielding production. Assignment areas included process engineer for phosphor deposition, UV lamp design and cathode engineering; device engineer for characterization of life, environmental operating window, optical efficacy; System engineer for support of marketing group.
- 1987 - 1993 PLASMACO, INCORPORATED, Highland, New York
Company: Start-up using IBM's former plasma panel manufacturing line; 80 employees
- Founder and Vice-president responsible for development, design, and manufacture of high voltage driver chip on glass technology. Responsible for all post clean room assembly, burn-in, characterization, yield management, and cost containment. Managed purchasing, coordinated vendor contracts for PCB assembly, power supply procurement, and process equipment purchases.
Participated in business plan writing, obtaining financing, construction, start-up, and staffing of 65,000 sq. ft. factory.
- 1986 - 1987 SIGMATRON NOVA, INCORPORATED, Thousand Oaks, California
Company: Thin film electroluminescent manufacturer; 40 employees
- Product Engineering Manager responsible for quick design and manufacture of custom TFEL displays. Characterized device failure modes and designed tolerant drive electronics to aid in long life displays.
One-third time accompanied Marketing Manager on trips to customers.
- 1985 - 1986 PLASMA DISPLAYS, INCORPORATED, Orange, California
Company: Consulting corporation
- AT&T Technologies, Incorporated, Reading, Pennsylvania
Assisted Bell Laboratories with technical leadership to the development, design and manufacturing groups involved with transferring unique 3-Electrode per pixel plasma display from prototype to high volume production.
- Data View, Incorporated, Champaign, Illinois
Designed and prototyped custom plasma display electronics and packaging in six months.

1979 - 1985 INTERSTATE ELECTRONICS CORPORATION, Anaheim, California
Company: Military contractor for US Navy; 1,800 employees

Engineer responsible for design, prototyping, and initial production of analog drive electronics in militarized plasma display terminal family; designing and documenting IEC's nuclear hardened display terminal; technical interface for procurement of electronic components and assemblies; liaison with other groups within company such as Quality Assurance, Manufacturing, and Parts Standards.

1977 - 1979 NCR CORPORATION, Electronic Display Systems, Colorado Springs, Colorado
Company: Manufacturing division for displays used in point of sale terminal; 60 employees

Specifying, designing, tooling, and scheduling of all new AC plasma panels; Process Engineer for vacuum backfill, overcoat application, and wet processing; principal Development Engineer for NCR second-generation plasma panels (shift type).

1973 - 1976 UNIVERSITY OF ILLINOIS, Coordinated Science Labs, Urbana, Illinois
Employer Profile: Multidiscipline laboratory where AC Plasma Panel was invented.

Design, construct and perform experiments leading to successful electron density and discharge activity measurements of a plasma panel.

PUBLICATIONS: Plastic Film Displays with Nanoblock™ IC Drivers Integrated by Fluidic Self Assembly™ Process, Jacobsen, et al., SID 2002

Manufacturing of Large Wide-View Angle Seamless Tiled AMLCD's for Business and Consumer Applications, Greene, et. al, International Display Manufacturing Conference 2000, Seoul, Korea

LCD Backlight Performance over the Military Operating Temperature Range, Marentic, SPIE 1995.

High-Speed Asynchronous Video Addressing of AC Plasma Panel Incorporating Brightness Control; Lee, Marentic, Moore, Weber; SID. 1986.

Two Equal-Brightness On-States in AC Plasma Displays Driven by Conventional Sustain Waveforms; Weber, Steiner, and Marentic; SID. 1983.

Brightness Control of the AC Plasma Panel; Suste and Marentic; SID. 1982

PATENTS: Plasma Display Panel Drive Electronics Improvement, M.J. Marentic.
U.S. Patent. #4,492,957

Advanced Waveform Techniques for Plasma Display Panels, M.J. Marentic.
U.S. Patent #4,415,892

Modular Waveform Generator for Plasma Display Panels, M.J. Marentic,
D.A. Manseau. U.S. Patent #4,464,657