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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Proceeding	92050789
Party	Plaintiff Nartron Corporation
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Date	11/04/2009
Attachments	Nartron BIO to HP's SJ Motion.pdf (19 pages)(368550 bytes) Signed RCJT SJ Aff w Exhibits.pdf (24 pages)(2889385 bytes) Signed JMW Decl w Exhibits.pdf (49 pages)(4922189 bytes)

**UNITED STATES PATENT AND TRADEMARK OFFICE
TRADEMARK TRIAL AND APPEAL BOARD**

NARTRON CORPORATION

Petitioner,

v.

Cancellation No. 92050789

**HEWLETT-PACKARD
DEVELOPMENT COMPANY, L.P.,**

Respondent.

**AFFIDAVIT OF ROBERT C.J. TUTTLE
IN SUPPORT OF PETITIONER'S OPPOSITION TO
RESPONDENT'S MOTION FOR SUMMARY JUDGMENT**

I, Robert C.J. Tuttle, state as follows:

1. I am an attorney duly licensed to practice law in the state of Michigan. I am an attorney of record for Petitioner, Nartron Corporation, and I am filing this Affidavit in support of Petitioner's Opposition to Respondent's Motion for Summary Judgment ("Petitioner's Opposition"). I have personal knowledge of the facts set forth herein and I am competent to testify to the matters stated herein.

2. Attached as Exhibit 1 to Petitioner's Opposition (also at Washeleski Decl., ¶7, Exh. D) is a press release from Cypress Semiconductor Corporation, dated May 9, 2007, titled: "Cypress's PSoC® CapSense Enables Touch Sensing Inside HP Compaq Notebook PCs." This press release is available at <http://www.aeccafe.com/>, specifically, http://www10.aeccafe.com/nbc/articles/view_article.php?articleid=388459&page_no=2, which I

accessed on October 12, 2009. This press release is relevant to show the similarities in the parties' goods, and that the parties' goods move in similar channels of trade.

3. Attached as Exhibits 2 to Petitioner's Opposition (also at Washeleski Decl., ¶13, Exh. I) is HP's brochure titled "**Improving automotive industry outcomes.**" This brochure is available for download from <http://h71028.www7.hp.com/ERC/downloads/4AA1-4190ENN.pdf>, which I accessed on October 12, 2009. This brochure is relevant, at a minimum, to show HP's goods may be used in and are targeted to the automotive industry.

4. Attached as Exhibits 3 to Petitioner's Opposition (also at Washeleski Decl., ¶14, Exh. J) are excerpts from Hewlett-Packard Company's October 31, 2008 Form 10-K, available at www.sec.gov, which I accessed on October 19, 2009. Statements from the October 31, 2008 Form 10-K are relevant to show that the parties goods move in similar trade channels.

I declare under penalty of perjury that the foregoing is true and correct.

November 4, 2009



Robert C.J. Tuttle

EXHIBITS

EXHIBIT 1 – Cypress Semiconductor Corporation May 9, 2007 Press Release:
“Cypress’s PSoC® CapSense Enables Touch Sensing Inside HP Compaq
Notebook PCs”

EXHIBIT 2 – HP Brochure: “Improving Automotive Industry Outcomes”

EXHIBIT 3 – Excerpts from Hewlett-Packard Company’s October 31, 2008 Form 10-K

EXHIBIT 1
TO PETITIONER'S BRIEF IN OPPOSITION
TO HP'S MOTION FOR SUMMARY JUDGMENT

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Cypress's PSoC(R) CapSense Enables Touch Sensing Inside HP Compaq Notebook PCs

SAN JOSE, Calif.—(BUSINESS WIRE)—May 9, 2007— Cypress Semiconductor Corp. (NYSE: CY) today announced that its PSoC(R) CapSense enables the touch sensing interface inside multiple HP Compaq Notebook PC models. The Cypress CapSense solution not only provides the interface for a smooth, glitch-free user experience, but it also controls LED indicator lights on the notebooks, saving board space and reducing costs.

"We are pleased to provide the CapSense solution to HP, a world leader in notebook computers," said Carl Brasek, business unit director for Cypress's CapSense products. "This usage model highlights one of the CapSense customer benefits -- the ability to perform additional functions on top of capacitive sensing."

"Given HP's focus on delivering easy-to-use and reliable notebook PCs to our business customers, HP is pleased to integrate the CapSense solution, which provides an excellent user experience and is less prone to every day wear and tear than exposed buttons," said Carol Hess-Nickels, director of worldwide business notebook marketing in the Personal Systems Group at HP. "In addition, the CapSense solution enhances the sleek design and superb functionality we're providing to customers."

About CapSense

A single CapSense device can replace dozens of mechanical switches and controls with a simple, touch-sensitive interface. CapSense-based "button" and "slider" controls are more reliable than their mechanical counterparts because they are not prone to the environmental wear-and-tear that affects exposed buttons and switches. Cypress has garnered well over 100 CapSense design wins worldwide in applications that include mobile handsets, portable media players, white goods, computers, printers and automotive, among others.

Capacitive sensing is fast becoming the solution of choice for front-panel display and media control applications. Increased durability, decreased bill of materials (BOM) and a clean, minimalist appearance make this elegant interface attractive to a wide range of designs. With Cypress's CapSense interface, a finger on the interface forms an electrical connection with embedded sensors, which work with the PSoC device to translate data about the finger's presence into various system control functions. The sensor itself is only a copper pad on the PCB, not an actual component. All of the circuitry for controlling the sensor is inside the PSoC device.

Cypress's CapSense solution offers system designers numerous advantages over capacitive sensing products built around modules and sub-assemblies, including increased flexibility, reduced board space and lower cost. Because of the unique PSoC architecture, designers can easily integrate multiple functions (e.g., LED drivers and LCD displays), in addition to capacitive sensing. The PSoC CapSense solution also delivers benefits such as easy communications using either I2C, SPI or USB interfaces, the ability to implement both trackpad (x-y matrix) and linear slider applications with the same device, and the ability to make quick design changes using the flash-based PSoC architecture. In addition, users can complete CapSense designs quickly and easily using pre-configured and verified "user modules" within Cypress's PSoC Designer(TM) 4.4 Integrated Design Environment (IDE). Learn more about CapSense online at www.cypress.com/capsense.

About the PSoC Family

PSoC devices are configurable mixed signal arrays that integrate a fast 8-bit microcontroller with many peripheral functions typically found in an embedded design. PSoC devices provide the advantages of an ASIC without the ASIC NRE or turn-around time. A single PSoC device can integrate as many as 100 peripheral functions with a microcontroller, saving customers design time, board

space and power consumption. Customers can save from 5 cents to as much as \$10 in system costs. Easy to use development tools enable designers to select configurable library elements to provide analog functions such as amplifiers, ADCs, DACs, filters and comparators and digital functions such as timers, counters, PWMs, SPI and UARTs. The PSoC family's analog features include rail-to-rail inputs, programmable gain amplifiers and up to 14-bit ADCs with exceptionally low noise, input leakage and voltage offset. PSoC devices include up to 32KB of Flash memory, 2KB of SRAM, an 8x8 multiplier with 32-bit accumulator, power and sleep monitoring circuits, and hardware I2C communications.

All PSoC devices are dynamically reconfigurable, enabling designers to create new system functions on-the-fly. Designers can achieve far greater than 100 percent utilization of the die, in many cases, by reconfiguring the same silicon for different functions at different times. Learn more about PSoC products at www.cypress.com/psoc and receive free online training at www.cypress.com/psoctraining.

About Cypress

Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the PSoC(R) Programmable System-on-Chip(TM), USB controllers, general-purpose programmable clocks and memories. Cypress also offers wired and wireless connectivity solutions ranging from its WirelessUSB (TM) radio system-on-chip, to West Bridge(TM) and EZ-USB(R) FX2LP controllers that enhance connectivity and performance in multimedia handsets. Cypress serves numerous markets including consumer, computation, data communications, automotive, industrial, and solar power. Cypress trades on the NYSE under the ticker symbol CY. Visit Cypress online at www.cypress.com.

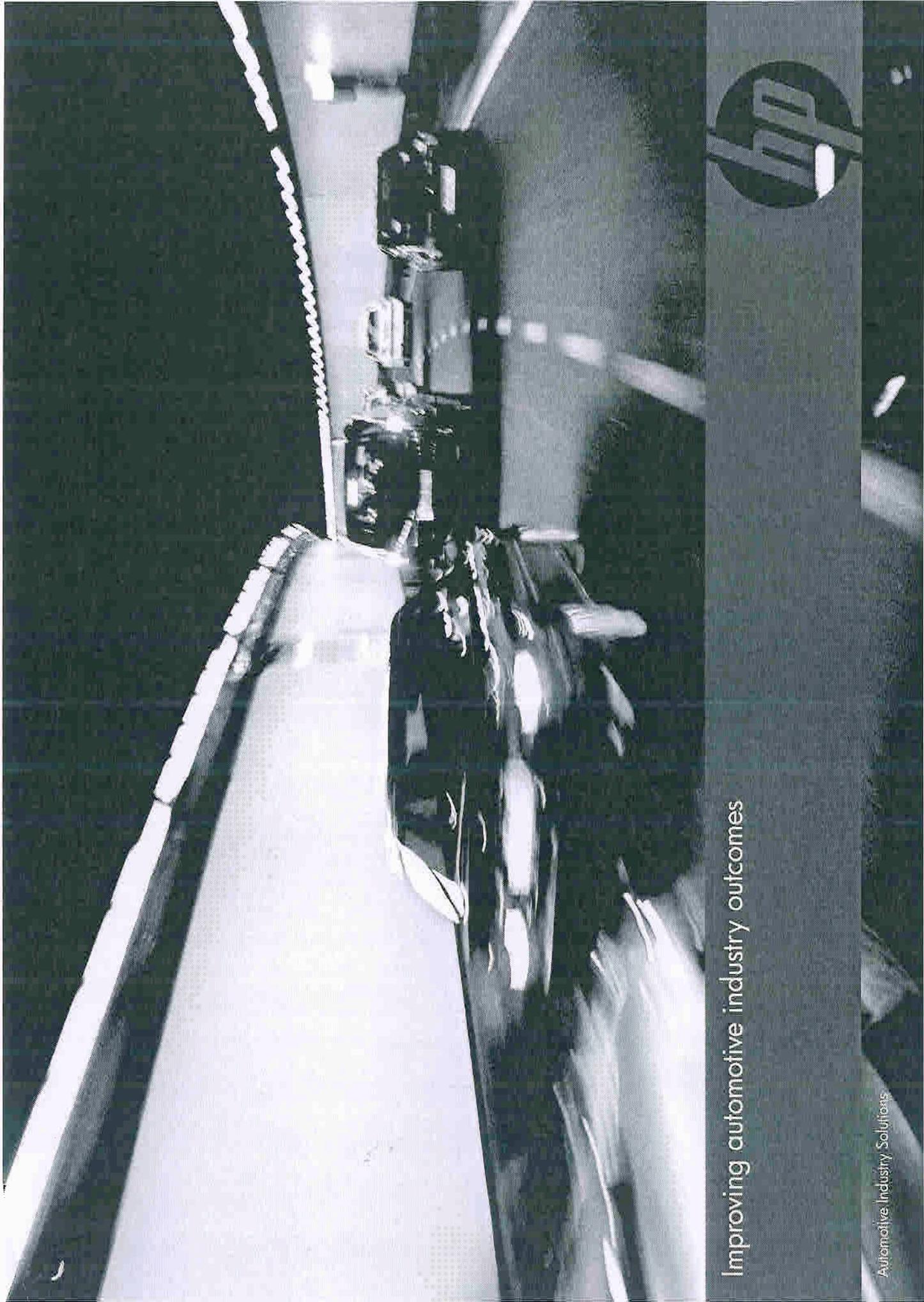
Cypress, the Cypress logo and PSoC are registered trademarks and PSoC Designer is a trademark of Cypress Semiconductor Corp. All other trademarks are property of their owners.

Contact:

Cypress PR
Don Parkman, 408-943-4885
Email Contact

Rating: ★★★★★

EXHIBIT 2
TO PETITIONER'S BRIEF IN OPPOSITION
TO HP'S MOTION FOR SUMMARY JUDGMENT



Improving automotive industry outcomes



Automotive Industry Solutions



Decision-makers at automotive OEMs and Tier 1 suppliers are at a crossroads for the future of their companies. Excess capacity and ferocious competition, especially from low-cost entries into the global marketplace, are pressuring the bottom line and forcing a major re-evaluation of where margins can be increased, costs controlled, and market share gained or at least stabilized. Supply chains are growing more complex, and many OEMs find themselves unable to quickly meet market demands due to poor visibility into supply and demand chain dynamics, inflexible infrastructure and lack of common global business processes throughout their supply ecosystems. At the same time, empowered consumers expect more vehicle choices, a wider range of features, and better overall quality from the vehicles they purchase—all while demanding excellent fiscal value. They also want innovation, from rapidly refreshed or fully redesigned body styles to vehicle management systems and in-vehicle electronics that allow drivers and passengers to stay connected in more ways than ever before.

HP recognizes the industry challenges, and has identified where innovative business technology and proven best practices offer automotive manufacturers and their suppliers opportunities to improve collaboration, nurture innovation and drive efficient execution across their extended operations. The end-to-end HP automotive industry portfolio includes complete solutions as well as specific business technology capabilities that range from data management to product lifecycle management, supply chain visibility and optimization to high performance computing solutions for design simulations, logistics and customer service to warranty management, and more. Just as importantly, HP has broad and deep experience in developing and implementing modular, standards-based technology solutions for automotive manufacturers worldwide, as well as proven global delivery capabilities that reduce the risks and time frames for deployment and integration.

HP for automotive

HP technology and services are used by virtually all leading automotive manufacturers and their suppliers worldwide. Continuing this tradition of delivering world-class business technology for automotive manufacturing, HP, along with its partners, continues to drive research into the solutions, capabilities, tools and technologies that help automakers and their suppliers achieve the business outcomes they seek. HP services address three imperatives for the automotive marketplace:

- **Innovation**

More than ever, innovation is the key to growing revenue and market share in a crowded marketplace. HP business technology helps streamline the product development process and shorten the time from concept to delivery. HP data management capabilities deliver a “single version of the truth” to all players along the value chain, making it easier to develop and migrate innovative features across the model line; HP product lifecycle management capabilities cut the development cycle by removing the technology barriers between designers and suppliers; and HP high-performance computing solutions control costs by enabling modeling simulations and other product design operations to run faster and with less drain on design resources.

- **Collaboration**

Automotive manufacturing is a deeply collaborative process; there’s a strong emphasis on working with other OEMs and auto suppliers to develop alternative fuel vehicles, new power train designs and in-vehicle electronics. HP capabilities and services speed collaboration for everything from new model development and assembly to logistics and warranty management, even across heterogeneous infrastructure and diverse geographies. Supply chain visibility solutions from HP improve transparency and accountability between suppliers and manufacturers; HP Halo studios effectively dissolve distance to bring engineers together no matter where in the world they are; and standards-based business intelligence and data warehousing capabilities from HP support common business processes across the enterprise, enabling faster sharing of accurate data between the design shop, the factory floor and the executive decision-makers.

The success of HP supply chain strategy is proven every day.

HP operates one of the world’s largest global supply chains. Since late 2005, the optimization of the HP internal supply chain through best practices and technology deployments have brought dramatic improvements, including \$3 billion in operational savings.

- **Execution**

Cost pressures make operational excellence a necessity for today’s automotive companies. HP capabilities in areas such as data center consolidation and application modernization help companies increase asset utilization, enhance infrastructure reliability and improve efficiencies all across the organization, which can lead to significant savings that can then be reinvested toward innovation. Whether companies need to implement radio frequency identification (RFID) technologies capabilities to track spare parts for assembly or warranty management, or manufacturing execution systems to coordinate activities on the assembly line, HP has proven, low-risk solutions and best practices that decrease costs, improve reliability and availability, and help improve execution across the global manufacturing environment.

Solutions and services from HP are designed to help spur top- and bottom-line revenue growth, reduce costs and control risk. These solutions are based upon HP Manufacturing Industry Reference Architecture (MIRA), a service-oriented architecture (SOA) that provides a unified, structured and consistent framework for constructing an explicit bridge or “line of sight” between IT and the desired business outcomes. Areas of expertise include:

- Product development
- Manufacturing and quality control
- Sales, service and parts
- Supply chain and business services
- Enterprise infrastructure



Product development

The message to automakers is clear—deliver exciting and engaging new products to market quicker, at an optimal price and with outstanding quality. To help automakers achieve these positive business outcomes, HP offers a range of innovative business technologies and services that builds excellence in the product development process from end to end.

Some key HP solution and capability areas for automotive product development include:

- **Master data management/information lifecycle management for automotive**
To large extent, automotive design and manufacturing have become data-driven industries. OEMs and Tier 1 suppliers are increasingly inundated with data streaming from across the enterprise, from collaborative partners, suppliers and customers. Thousands of categories of data may need to be analyzed, shared and managed. Companies that are able to successfully turn this data into actionable insight will gain competitive advantage.

HP master data management (MDM) capabilities address acquisition, management and integration of data from across today's global automotive manufacturing supply and demand chains. A unified strategy is applied for the three phases of data management—capture, storage and distribution—for improved accuracy, accessibility and cost-effective control over the data. By helping automotive manufacturers arrive at a "single version of the truth," HP Master Data Management solutions enable faster, more informed decision-making across the extended automotive enterprise. HP information lifecycle management (ILM) solutions are designed to reflect that the business value of data changes over time. HP ILM solutions migrate data to lower-cost storage as appropriate, saving money while enabling the data to remain available as needed for optimal business decisions.

- **Product lifecycle management (PLM)**

Production runs for many vehicle models are becoming significantly shorter, with more buyers looking for customized configurations or niche vehicles that better fit their specific commercial requirements or personal lifestyles. These shorter product lifecycles are stressing the capabilities of legacy processes, infrastructure and applications, demanding greatly enhanced collaboration between product designers, parts and subassembly contractors, and all value chain partners who may be scattered around the globe.

Drawing upon a repository of field-proven best practices and standards-based, modular components that easily integrate with existing infrastructure, HP can design and implement a next-generation PLM strategy that can help companies respond faster to new market opportunities. The HP PLM portfolio includes:

- **HP Product Lifecycle Management Appliance**, a scalable solution featuring hardware, software and services that promote secure data consolidation and management for seamless remote collaboration. By enhancing the speed and accuracy of data management and transfer, new product design windows can be shortened.

- **HP Product Lifecycle User Simulation (PLUS)**, a simulation environment for testing product development processes featuring workshops and data modeling tools that help demonstrate the benefits and potential pitfalls of the initiative before full roll out occurs. This environment also establishes a foundation for the development and launch of maintenance and future services.

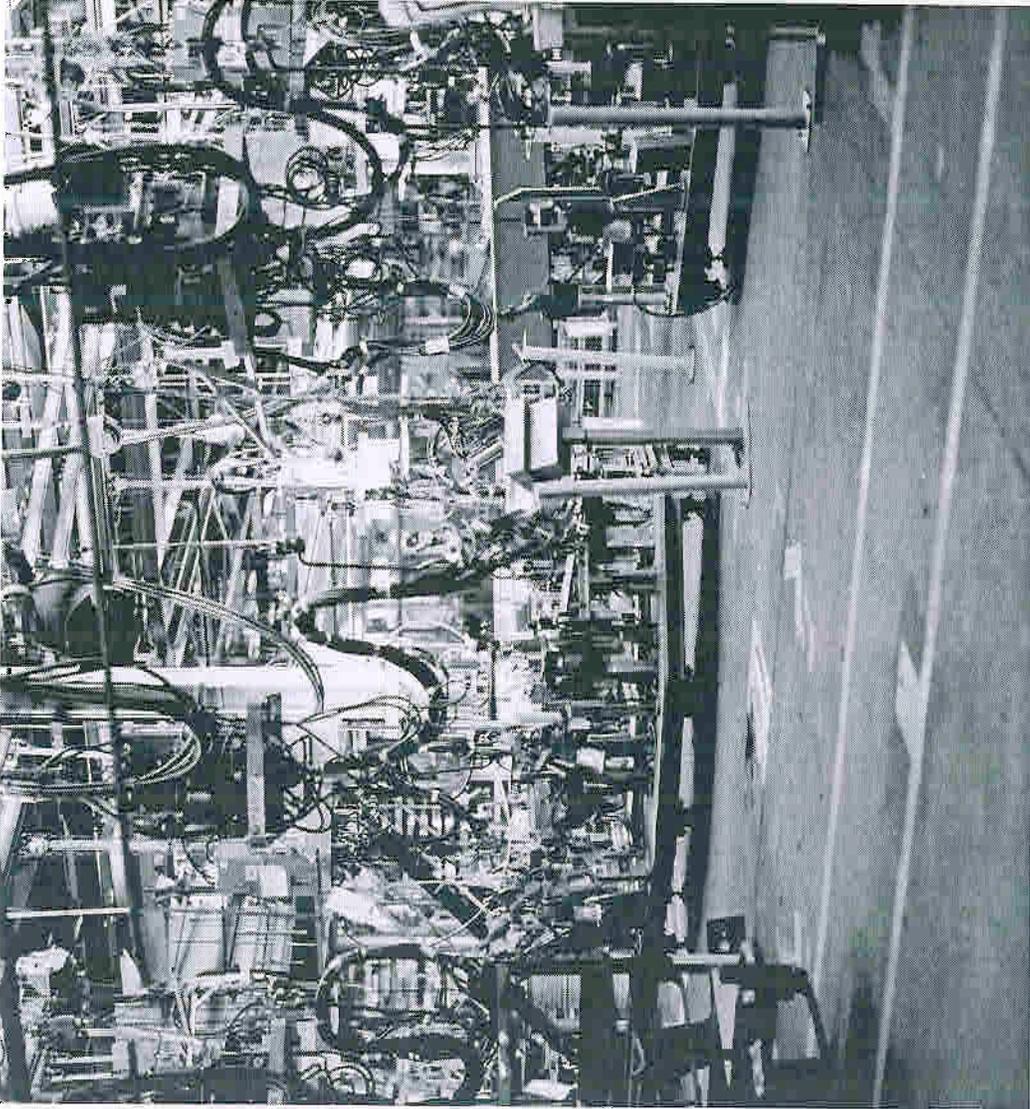
- **HP Software for PLM** allows comprehensive management, monitoring and testing for the end-to-end PLM environment. PLM depends on a stable, reliable, high-performance infrastructure for optimal availability and response. HP business technology optimization (BTO) products enable IT to manage the end-to-end PLM environment, increase application performance and availability and optimize PLM infrastructure through automated maintenance and testing.

- **High-performance computing for the automotive industry**

HP provides a portfolio of high-performance computing solutions that help product design teams improve productivity, collaboration and design validation capabilities. High-speed visualization tools allow design teams to construct, test and modify simulated models rather than time-consuming clay models. Offerings span low-cost single-CPU systems to high-end, switched-mode power supply systems and clustered computing solutions comprising hundreds of nodes and thousands of processors and multiple operating environments, as well as fully managed, on-demand computing resources.

- **Halo Studio**

Geographically-dispersed automotive companies and their suppliers must collaborate efficiently across the entire ecosystem. HP Halo Studios help companies work together around the world without ever leaving the office by allowing meeting participants to transparently share charts, diagrams and schematics across the highly secure Halo Video Exchange Network, a dedicated, delay-free fiber-optic network. Halo Studios allow companies to collaborate globally, which translates into quicker release of new models at lower cost and reduces the need for, or the impact of, engineering changes.



Manufacturing and quality

Central challenges for manufacturing and quality control include enhancing flexibility to handle multiple models on a single assembly line, integrating diverse systems, increasing the commonality of processes and systems, and ensuring consistent product quality across geographically and culturally diverse global manufacturing operations. Business technology systems need to be integrated, secured and made more reliable and available.

HP can quickly construct complete, end-to-end solutions comprised of modular, off-the-shelf components that produce rapid return on investment. Proven, standards-based HP business technology components and services enhance execution by tying together enterprise resource management, product lifecycle management, supply chain and other systems into a cohesive whole. These capabilities improve visibility and control over business information, enabling better execution of business processes and encouraging optimal business outcomes.

Key HP capabilities and solution areas for manufacturing and quality include:

- **Manufacturing execution systems**

HP offers system integration and high-performance data management strategies and technical capabilities, including providing seamless integration and connectivity for equipment and IT systems on the factory floor with enterprise-level applications and executive dashboards for real-time visibility of key performance indicators. This integration at the factory floor level minimizes downtime and maximizes production output.

- **Secure, high-availability infrastructure**

HP solutions, components and services utilize high-availability, massively scalable infrastructure that has been pre-tested and pre-integrated for greater uptime under demanding conditions. Unified infrastructure management improves control over heterogeneous operating environments and applications, while energy-efficient consolidation and virtualization strategies concentrate computing density and reduce the costs of operations and maintenance. Proactive HP security strategies help certify that data remains safe and available for all business needs, as well as environmental and regulatory requirements.

- **Cross-enterprise integration**

The move toward producing more vehicle models, but fewer units per model, means that manufacturers need greater flexibility. That requires integration across multiple enterprise systems, from assembly scheduling systems to workstation management systems to ERP systems. HP integration experts draw upon proven business technologies, such as Collaborative Business Infrastructure delivered in partnership with Microsoft®, as well as best practices to integrate data sources on the factory floor with factory-wide applications and within the overall enterprise and supply chain applications. Such cross-enterprise integration drives continuous process improvements that can enhance execution, reduce costs, shorten the time to deliver in-demand or assemble-to-order products to the dealer at the right time.

Sales, service and parts

Total customer satisfaction depends on customer's dealer experience, product excellence and after-sales service. In addition to customer satisfaction, OEM profitability is impacted greatly by the effectiveness of its demand service chain. HP business technology capabilities can support automotive sales and customer service professionals worldwide by providing linkage between dealer, OEM, logistic providers, service providers and the consumer. These linkages provide sales, marketing, service, spare part division and the OEM designers with current, accurate information so that they can better serve their customers.

Key HP capabilities areas for sales, service and parts include:

- **Dealer systems**

HP can help integrate and improve commonality among dealer systems, creating an adaptive infrastructure that optimizes the vital links between the consumer, dealer and OEM. This adaptive infrastructure helps to reduce business technology cost, improve security, reliability and availability of the system for the dealer and the OEM. This infrastructure also facilitates the delivery of the latest service details and software to the service points.

- **Service parts operations integration**

Customer satisfaction and brand loyalty are very dependent on the effective management of aftermarket parts and services. HP business technology optimization capabilities can help to integrate and manage automotive OEM and suppliers' systems for aftermarket parts, and provide dependable solutions to link OEM and suppliers globally.

- **RFID capabilities**

As a world leader in RFID technology, HP offers RFID capabilities that can help improve efficiency and cut costs by tracking parts during assembly, work-in-process tracking of vehicles as they are built, and tracking the vehicle after assembly, with RFID (active, passive, ultra-wide band, Wi-Fi enabled), GPS and other relevant technologies.

- **Warranty management**

HP successfully manages the warranty demands of more than one billion customers in 170 countries, and HP has actually shown a notable decrease in warranty spending as a percentage of total costs over the past few years, due to the implementation of innovative warranty technologies and strategies.

The HP Warranty Solutions portfolio and warranty-related capabilities address the complete strategic, tactical and operational aspects of warranty management. HP utilizes both warranty functional modules and specialized warranty point solutions for such critical requirements as early warning, advance reporting, tracking and analytics.

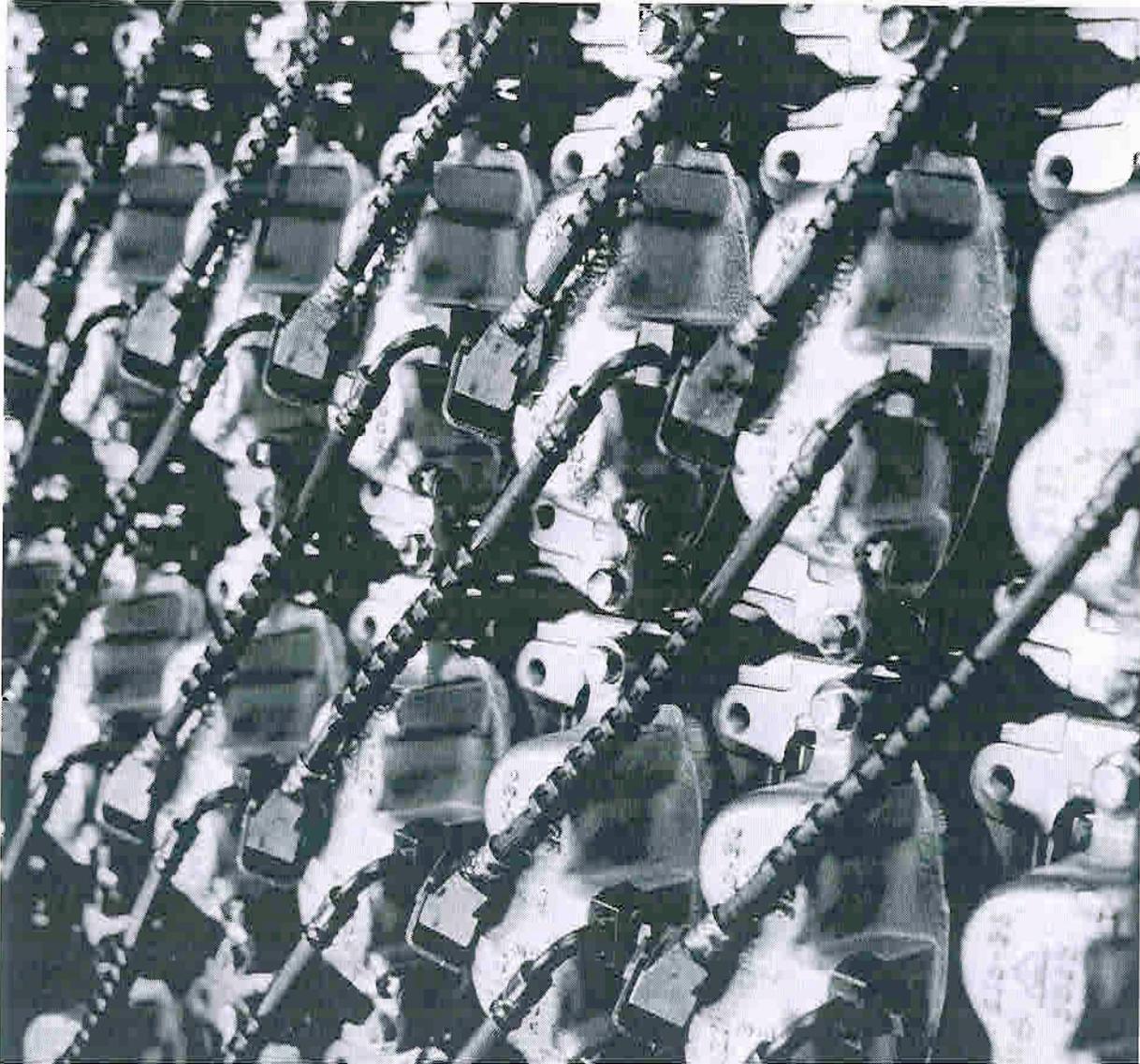
Supply chain and business services

Increase revenue, reduce cost and mitigate risk by improving collaboration, visibility and control over automotive supply chains that are expanding into new geographies and encompassing new partners. HP supply chain capabilities and services address the entirety of supply chain operations, from initial assessment and benchmarking of current operations to efforts to increase transparency and accountability to outsourcing of business processes to allow manufacturers to manage business outcomes while focusing on their core competencies.

The HP supply chain portfolio includes:

- **Supply Chain Assessment Services**

HP supply chain consultants measure current process flows and metrics data against industry best practices for procurement, logistics and global trade, as well as against desired business outcomes. The assessment services can enhance return on investment while lowering both risks and costs of supply chain evolution.



- HP is a SAP Global Services Partner, and runs one of the largest SAP installations in the world.
- HP has been an annual winner of the SAP "Award of Excellence" since 1985, and was the first SAP partner to achieve 50,000 SAP application implementations.
- HP has been rated #1 in customer support, outsourcing and responsiveness for mission-critical SAP environments by Gartner.
- More than 50 percent of existing SAP small and medium business customers use HP systems.
- HP is a market leader in SAP R/3 outsourcing services.

• **Supply Chain Visibility**

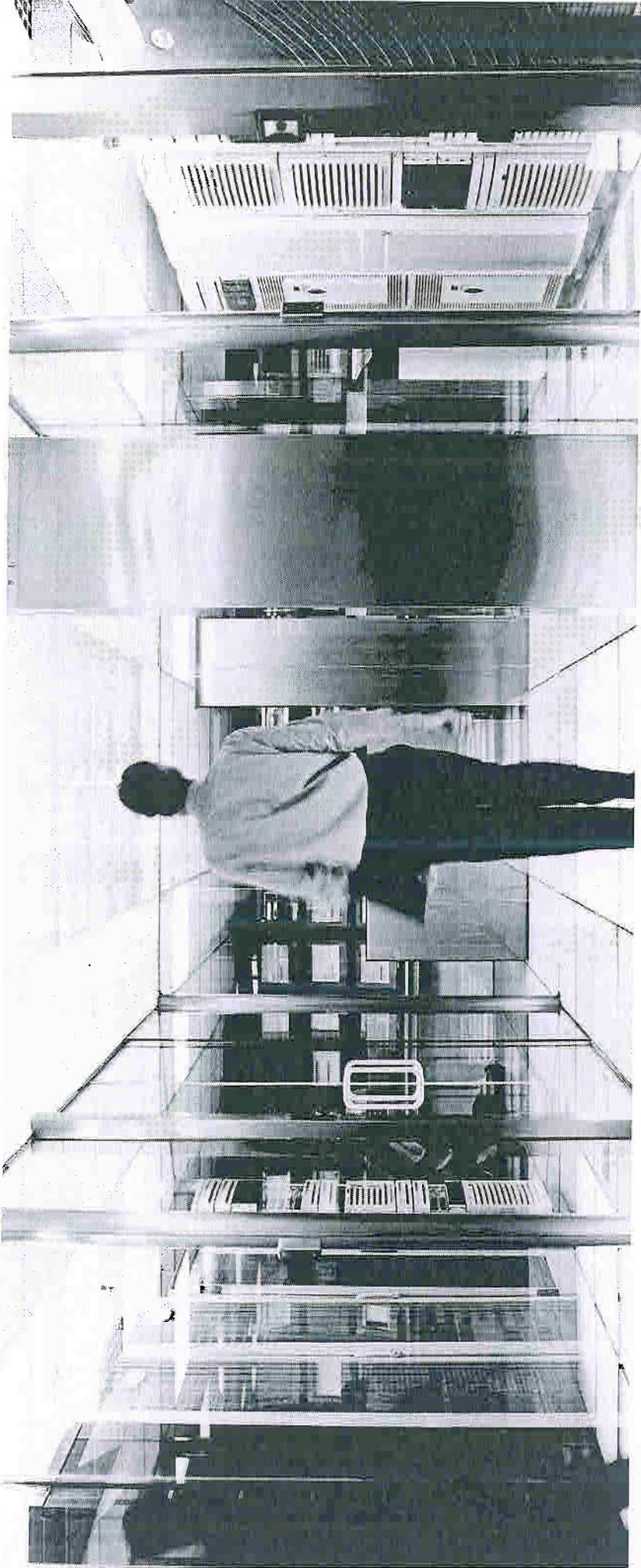
Visibility—the ability to know what's going on across the extended supply chain and take immediate corrective action when and where needed—is a key to thriving in the global automotive marketplace. HP Supply Chain Visibility capabilities combine key performance metrics, business processes, and proven best practices based upon the Supply Chain Council's Supply Chain Operations Reference (SCOR), and HP integrated global supply chain experience. Visibility also allows long-term supply chain optimization that enables improved strategic and operational decision-making and responsiveness.

• **Enterprise Resource Planning—SAP**

HP is the leader in the SAP environment design, implementation and management, and HP also has significant experience and capabilities in implementing IS-Auto. HP solution and capability areas include application implementation and business technology infrastructure services, and encompass conventional SAP implementations, SAP Enterprise portals, and design and deployment of Advanced Planning and Scheduling (APS) solutions, along with other supply chain management and optimization solutions. This framework gives automotive manufacturing companies a roadmap for implementing ERP solutions that help streamline and integrate their businesses, improve collaboration and reduce risk.

HP capabilities for SAP include:

- SAP implementation
- HP offers implementation, hosting and ongoing technical support for the mySAP Business Suite, from planning to deployment to management and operation of an efficient SAP R/3 system.
- SAP consolidation, upgrades and migration
- Mergers, acquisitions and organic growth have resulted in decentralized, heterogeneous SAP landscapes, straining operational and maintenance budgets. HP helps automotive manufacturers consolidate, migrate, and upgrade their SAP environments, including providing support for key SAP NetWeaver capabilities.
- SAP Business Services Management (BSM)
- Built on an enterprise service-oriented architecture (eSOA), HP BSM encompasses eSOA governance, quality and management, with elements for business process monitoring, governance and change management, test management and automation, synthetic transaction monitoring, and integrated incident management services. The solution is powered by the HP BSMconnect, Semi-Packaged Composite Application certified by SAP.



Enterprise infrastructure

HP strategy for designing and deploying business technology infrastructure is centered on helping companies streamline collaboration, spur innovation and improve execution. To achieve their desired business outcomes, automotive manufacturers must lower the costs of maintaining inefficient infrastructure, implement enhanced infrastructure monitoring, and establish repeatable, consistent business and security policies. HP offers leading-edge business technology backed with comprehensive lifecycle services, such as planning, consulting, design, analysis and implementation, all designed to improve return on existing assets and increase the benefit from all future technology investments.

Key HP services and solution areas for enterprise infrastructure include:

- **Business technology consolidation**

HP business technology consolidation capabilities target redundant and inefficient data bottlenecks and help eliminate infrastructure sprawl by consolidating data centers, networks and other infrastructure islands into fewer, centralized locations. Massively scalable HP solutions enable faster reaction to evolving market conditions and opportunities, and can significantly lower the costs of real estate and energy. Further, they can help deliver to HP customers and their ecosystem partners high levels of data availability, accuracy and security, with easier and less costly management.

- **Infrastructure and application management**

The pace of business has never been more frenzied; shorter design cycles demand improved flexibility, efficiency and availability from manufacturing applications and infrastructure. Modular, standards-based HP solutions and components offer a proven approach with robust management and control features for streamlined management and control throughout the lifecycle of composite applications and services. Integration with other HP Software products and third party tools is enabled for greater return on existing business technology assets. And HP also offers fully managed hosting services that can reduce the total cost of ownership (TCO), mitigate risk and increase the business value of application environments.

- **Business continuity and availability**

Automotive manufacturers depend on access to critical IT services and information. HP helps these customers prepare for a broad range of threats to the availability and stability of core infrastructure. These threats might include communications disruptions, problems with certain applications, scalability issues due to unexpected customer traffic volumes, and even natural or man-made disasters. Our holistic approach features a mix of proactive and reactive services, which is tailored to the specific requirements of each customer. Through this approach, HP can help control exposure and reduce vulnerability, harden mission-critical operations, and increase the speed of recovery should a major catastrophe strike.

The HP advantage for automotive manufacturing

HP has a long history of supplying innovative technology and thought leadership to the automotive industry, and that legacy continues to grow. The HP solutions portfolio for automotive draws upon a large number of field-proven best practices that help drive innovation and improve collaboration, controlling costs while enhancing visibility and security all along the supply chain. HP focuses decades of expertise and partnerships with leading technology innovators into a powerful integrated team to assist the world's top automotive manufacturing organizations to meet their customers' needs.

HP has:

- A track record of helping clients recover from more than 5,000 disasters
- One-stop shopping for solutions from planning to prevention to recovery
- Global reach, with more than 50 internationally located recovery facilities
- A collaborative approach that eases knowledge transfer
- Best practices-based methodology to analyze, build, integrate, manage, and evolve continuity solutions
- More experience with disaster-tolerant environments than any competitive vendor
- Flexible contract terms that address changing IT environments and business needs

HP delivers solutions, technologies and services arrayed across network infrastructure, network services, operations and business support, mobile solutions and end-user access. These solutions and services are based on open standards and feature planned upgrade roadmaps and technologies that support diverse operating environments and geographies. With expertise in developing, integrating, testing, installing and supporting the most complex deployments, HP provides a one-stop shopping approach that allows manufacturers to remain focused on business. And every HP solution is backed with the HP global delivery pipeline and locally available and experienced implementation and support teams that help reduce the risks and time frames for solution deployment and integration.

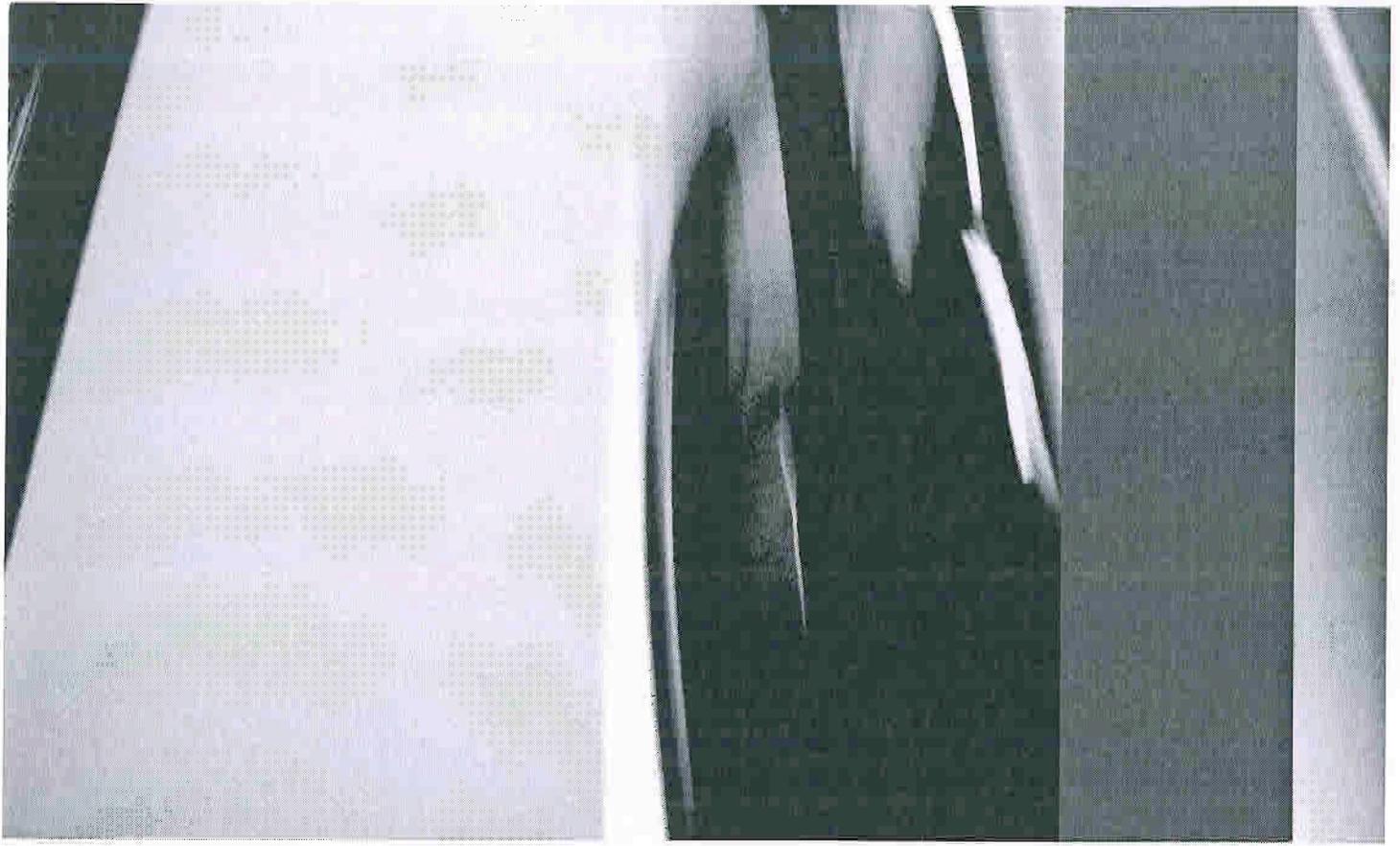
These innovative capabilities have made HP a major business technology supplier that is leading change in the automotive manufacturing industry. As the automotive industry continues to evolve, HP will be there to provide the solutions and services that keep it moving forward.

HP Services

Every HP solution leverages proven global experience that spans people, processes and technology. HP Services consultants understand the automotive industry, and can help companies get the most from their IT investments. HP Services can help in these critical areas:

- **Application Modernization Services**—These services offer a full range of mainframe transition services, current and future business need assessments, strategic and technological roadmaps for change, and monitoring services for the evolved application environments.
- **Mission Critical Support**—Onsite consulting and technical support is available at whatever level of service the organization desires, including Operational ITSM to help benchmark IT processes against others.
- **Outsourcing Services**—HP offers a comprehensive portfolio of innovative and scalable sourcing options, so company personnel can focus time and resources on their core business.
- **Security Services**—HP has developed a detailed methodology for secure evolution of the manufacturing environment. Risk is minimized and both the data and the network are protected.
- **Financial Services**—HP Financial Services offers a range of creative and flexible financing options.

Across the globe, enterprise customers rely on HP Services to design, build, integrate and manage the IT systems that run their businesses. HP Services capabilities cover consulting and integration, outsourcing, support, and education services, all delivered by more than 69,000 services professionals in 170 countries. As the marketplace continues to evolve, HP Services will be there to help automotive OEMs and suppliers adapt and compete.



For more information: www.hp.com/go/automotive

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4AA1-4190ENN; July 2007



EXHIBIT 3
TO PETITIONER'S BRIEF IN OPPOSITION
TO HP'S MOTION FOR SUMMARY JUDGMENT

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-K

(Mark
One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended: **October 31, 2008**

Or

- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number **1-4423**

HEWLETT-PACKARD COMPANY

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-1081436
(I.R.S. employer
identification no.)

3000 Hanover Street, Palo Alto, California
(Address of principal executive offices)

94304
(Zip code)

Registrant's telephone number, including area code: **(650) 857-1501**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock, par value \$0.01 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer
(Do not check if a smaller reporting company)

Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the registrant's common stock held by non-affiliates was \$114,540,461,000 based on the last sale price of common stock on April 30, 2008.

The number of shares of HP common stock outstanding as of November 30, 2008 was 2,416,201,335 shares.

DOCUMENTS INCORPORATED BY REFERENCE

DOCUMENT DESCRIPTION

10-K PART

Portions of the Registrant's notice of annual meeting of stockholders and proxy statement to be filed pursuant to Regulation 14A within 120 days after Registrant's fiscal year end of October 31, 2008 are incorporated by reference into Part III of this Report.

Sales, Marketing and Distribution

We manage our business and report our financial results based on the principal business segments described above. Our customers are organized by consumer and commercial customer groups, and distribution is organized by direct and channel. Within the channel, we have various types of partners that we utilize for various customer groups. The partners include:

- retailers that sell our products to the public through their own physical or Internet stores;
- resellers that sell our products and services, frequently with their own value-added products or services, to targeted customer groups;

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- distribution partners that supply our solutions to smaller resellers with which we do not have direct relationships;
- independent distributors that sell our products into geographies or customer segments in which we have little or no presence;
- original equipment manufacturers ("OEMs") that integrate our products with their own hardware or software and sell the integrated products;
- independent software vendors ("ISVs") that provide their clients with specialized software products, frequently driving sales of additional non-HP products and services, and often assist us in selling our products and services to clients purchasing their products; and
- systems integrators that provide various levels and kinds of expertise in designing and implementing custom IT solutions and often partner with HPS to extend their expertise or influence the sale of our products and services.

**UNITED STATES PATENT AND TRADEMARK OFFICE
TRADEMARK TRIAL AND APPEAL BOARD**

NARTRON CORPORATION

Petitioner,

v.

Cancellation No. 92050789

**HEWLETT-PACKARD
DEVELOPMENT COMPANY, L.P.,**

Respondent.

**PETITIONER'S BRIEF IN OPPOSITION TO
RESPONDENT HEWLETT-PACKARD
DEVELOPMENT COMPANY, L.P.'S
MOTION FOR SUMMARY JUDGMENT**

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MISCELLANEOUS

J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition,
§ 11.91 (4th ed. 2005) 11

CONCISE STATEMENT OF THE ISSUE PRESENTED

Should the Board deny HP's Motion for Summary Judgment where the evidence presented on the record of this Motion – even before Nartron has been able to use the tools of fact discovery – demonstrates the *DuPont* factors tip decidedly in favor of Nartron on the §2(d) likelihood of confusion determination?

Applicant answers: Yes.

I. INTRODUCTION

It is axiomatic that attorney argument is no substitute for evidence on a summary judgment motion. *Glaverbel Societe Anonyme v. Northlake Marketing & Supply, Inc.*, 45 F.3d 1550, 1562 (Fed. Cir. 1995). Yet the sum and substance of Respondent Hewlett-Packard Development Company, L.P.'s ("HP's") motion is nothing but attorney argument. HP wants the Board to summarily dismiss the cancellation petition before Nartron Corporation ("Nartron") can use the tools of discovery to adduce additional evidence on the *Du Pont* factors, and test the veracity of the factual allegations of HP.

This opposition demonstrates there are genuine issues of material fact precluding summary judgment on all *Du Pont* factors raised on HP's motion. The similarity of the parties' respective marks cannot be denied - - they are formed of the same words, only re-ordered. The similarity of the goods, *as recited*, in the respective registrations is indisputable - - the graphic user interface of HP's TOUCHSMART "personal computers, computer hardware, computer monitors, computer display screens," uses the "electronic proximity sensors and switching devices" of Nartron's SMART TOUCH registration, U.S. Reg. No. 1,681,891 ("the '891 registration"). The channels of trade are common, as will be proved by HP's own publications, including its 2008 Form 10-K and promotional literature in the automotive industry.

SMART TOUCH has been (i) a flagship trademark of Nartron for over 20-years, (ii) registered on the Principal Register for over 18-years, and (iii) successfully asserted in ten (10) prior proceedings before the Board. HP's request for summary judgment is premature and shallow. It should be denied on the evidence of record.

II. DISCUSSION OF THE *DuPONT* FACTORS

A. **The Parties' Marks, SMART TOUCH and TOUCHSMART, Are Similar in Their Entireties**

1. **DuPont Factor No. 1 - The Similarity Of The Marks**

DuPont Factor No. 1 is the “similarity or dissimilarity of the marks in their entireties.”

In re E.I. DuPont DeNemours & Co., 476 F.2d 1357, 1361, 177 USPQ 563, 567 (CCPA 1973).

This factor examines the relevant features of the marks, including appearance, sound, connotation, and commercial impression. The Federal Circuit stated in *Hewlett-Packard Co. v. Packard Press, Inc.* that the first *DuPont* factor “is a predominant inquiry.” *Hewlett-Packard*, 281 F.3d 1261, 1265, 62 USPQ2d 1001, 1003 (Fed. Cir. 2002).

2. **The Rival Marks of Petitioner and Respondent**

The mark of Petitioner Nartron’s ‘891 registration is: SMART TOUCH.

The mark of Respondent HP’s U.S. Reg. 3,600,880 is: TOUCHSMART.

It is self-evident that these marks are formed of the same words, *i.e.*, SMART and TOUCH, with their order reversed in each mark.

3. **Re-Ordering the Word Elements of Marks Does Not Make Them Dissimilar**

It is a venerable rule of registration practice that “the points of similarity are of greater importance than the points of difference.” *Hoffman-LaRoche, Inc. v. Kawerk*, 148 F.2d 557, 65 USPQ 218, 220 (CCPA 1945). An important point of similarity of SMART TOUCH and TOUCHSMART is that they are formed of identical words.

The only point of difference is the ordering of the words SMART and TOUCH. But transposing words does not make the resultant marks dissimilar. The Board’s Opinion in *Bank Of America National Trust And Savings Assoc. v. The American National Bank of St. Joseph*, 201

USPQ 842 (TTAB 1978), is informative to the present case. In *Bank Of America*, the rival word marks were BANKAMERICA and BANK OF AMERICA, on one hand, and AMERIBANC, on the other hand. The Board found these marks “similar,” as explained in the following excerpt from the *Bank Of America* Opinion:

In the present case, the words “BANKAMERICA” and “BANK OF AMERICA,” on one hand, and “AMERIBANC,” on the other, convey the same meaning and create substantially similar commercial impressions. In view thereof, and considering that this is not a case where the marks of the parties are likely to be encountered by purchasers on a side-by-side basis, and that the average purchaser is not infallible in his recollection of trade designations and may well transpose the elements of a mark in his mind, we do not believe that differences between the marks of the opposer and applicant, considered in their entireties, are sufficient to preclude the likelihood that the contemporaneous use of these marks in connection with similar services here involved will result in confusion or mistake or deception.

Bank Of America, 201 USPQ at 845.

In this case, HP’s transposition of the word elements of the mark SMART TOUCH to form TOUCHSMART does not make the marks dissimilar. Indeed, the average person is not infallible in his recollection of trademarks and may well transpose the two elements in his mind. *See In re Wm. E. Wright Co.*, 185 USPQ 445 (TTAB 1975); *In re Atlantic Gulf Service*, 184 USPQ 828 (TTAB 1974).

HP attempts to draw distinctions between the connotation and commercial impression of the parties’ marks by relying on unsupported claims that “the reverse sequence in TOUCHSMART emphasizes the term ‘TOUCH’ – as a verb and can be understood as an imperative sentence urging the consumer to touch smart...” and “thus assumes a different connotation from Nartron’s adjective-/noun- focused SMART TOUCH mark.” HP’s Motion at p. 4. HP imposes meaning on the marks that are not defined in the record. HP fails to consider, for example, that

Nartron's mark could be interpreted as an adverb/verb combination, or that TOUCH could also be interpreted as a noun in HP's mark (i.e., "a touch smart"). It is clear that both marks are capable of more than one meaning or interpretation, and there is no clear difference in meaning because of the changed position of the elements of the marks. As such, there is not a marked distinction in the connotation or commercial impression created by the two marks when used in connection with the involved goods.

On the present record, the similarity of the rival SMART TOUCH and TOUCHSMART marks precludes summary judgment in favor of HP. At a minimum, Nartron should be afforded the opportunity for case investigation and discovery of HP to further develop the analysis under Factor No. 1. For example, Nartron's pending Rule 34 Request No. 4 to HP for: "*Documents relating or referring to any survey, focus group, or similar form of market study concerning potential or actual use of TOUCHSMART by Respondent,*" will aid the Factor No. 1 inquiry.

B. The Parties' Goods Are Related

1. DuPont Factor No. 2 - The Similarity of the Goods

DuPont Factor No. 2 is the "similarity or dissimilarity and nature of the goods or services as described in an application or registration or in connection with which a prior mark is in use." *DuPont*, 476 F.2d at 1361. Even if the goods and services in question are not identical, the consuming public may perceive them as related enough to cause confusion about the source or origin of the goods and services.

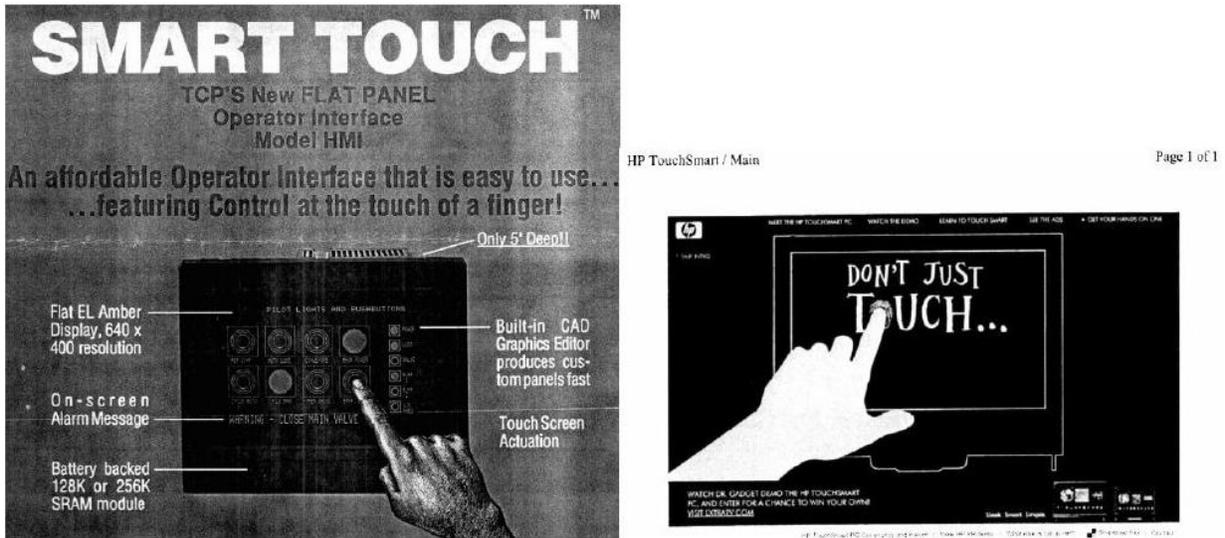
2. The Goods of Petitioner’s and Respondent’s Marks

The goods of Nartron’s ‘891 registration are: “electronic proximity sensors and switching devices” in International Class 9.

The goods of HP’s ‘880 registration are: “personal computers, computer hardware, computer monitors, computer display screens,” also in International Class 9.

3. The Goods are Closely Related

The graphic user interface of HP’s TOUCHSMART “personal computers, computer hardware, computer monitors, computer display screens,” uses the “electronic proximity sensors and switching devices” of Nartron’s ‘891 registration. This is illustrated by the following side-by-side comparison of the specimen of use in the application file of Nartron’s ‘891 registration and a printout from HP’s website, taken from Exhibit 2 to the Petition to Cancel:



The graphic user interface on HP’s TOUCHSMART “personal computers, computer hardware, computer monitors, computer display screens,” uses embedded capacitors that sense the proximity of a user’s finger on the screen to alter electrical circuit properties that implement various system control functions (e.g., switching) . This is explained in the press release from Cypress

Semiconductor Corporation, dated May 9, 2007, titled: “Cypress’s PSoC® CapSense Enables Touch Sensing Inside HP Compaq Notebook PCs.” Exhibit 1; Washeleski Decl., ¶7, Exh. D. The following sentence from the Cypress press release explains:

With Cypress’s CapSense interface, a finger on the interface forms an electrical connection with embedded sensors, which work with the PSoC device to translate data about the finger’s presence into various system control functions.

These embedded sensors (capacitors) and their associated circuits *are* the “electronic proximity sensors and switching devices” of Nartron’s ‘891 registration.

4. Nartron is a Pioneer in the Field of Capacitive Touch Sensing and Control

Nartron is a pioneer in the technology field of capacitive sensing. An example is Nartron’s patent U.S. 4,731,548, titled “Touch Control Switch Circuit.” Washeleski Decl., ¶8, Exh. E. The Nartron ‘748 patent issued on March 15, 1988, based on an application filed on September 29, 1986. Figure 1 of the Nartron ‘548 illustrates an circuit for providing a touch-controlled electrical switch in which the user’s body (*e.g.*, finger) alters the capacitance of the circuit - - just as in the Cypress “CapSense” interface used in HP’s TOUCHSMART products.

5. The Goods of Nartron’s ‘891 Registration Have a Wide Range of Product Applications

Nartron’s SMART TOUCH electronic proximity sensors and switching devices have a wide range of product applications. This is explained in the Nartron data sheet titled “**Smart Touch®** Keypad Part No. 1310674.” Washeleski Decl., ¶9, Exh. F. The Nartron data sheet explains in relevant part:

Smart Touch ® enables a person to use fingers to control computer software through a display screen. A key feature of Smart Touch ® allows multiple touches simultaneously or sliding fingers across a

screen. Applications include the automobile IP [instrument panel], radio and HVAC controls.

Two Nartron brochures that illustrate exemplary applications of Nartron's SMART TOUCH products are at Washeleski Declaration Exhibits G and H. The first brochure, titled "**Virtual Touchpad**," shows application of Nartron's SMART TOUCH products in an automotive window pad control. The second brochure, titled "**Connecting you with your vehicle . . .**," shows six different applications of SMART TOUCH technology in an automotive environment.

6. HP Has a Product Footprint in the Automotive Industry

HP has a substantial product presence in the automotive industry. This is proved by the HP brochure titled "**Improving automotive industry outcomes.**" Exhibit 2; Washeleski Decl., ¶13, Exh. I. An HP computer is shown in the photograph on page 5 of the HP brochure, under the heading "Product development." The HP brochure explains that HP is deeply invested in the automotive market, as typified by the following excerpt from page 6 of the brochure:

- **High-performance computing for the automotive industry**

HP provides a portfolio of high-performance computing solutions that help design teams improve productivity, collaboration and design validation capabilities.

The HP brochure is in direct conflict with the naked argument of HP's counsel on page 8 of the motion papers that "*HP's claimed goods are well-known consumer electronic products.*" The word "consumer" does not appear in the recitation of goods in HP's '880 registration. HP's TOUCHSMART "personal computers, computer hardware, computer monitors, computer display screens," are not limited to any product field or application, or class of customers. HP is aggressively pursuing the automotive market. HP's TOUCHSMART products and Nartron's

SMART TOUCH products are positioned to intersect in common product markets and among common customers.

Accordingly, the respective goods of Nartron's '891 registration and HP's '880 registration are "related," in the sense of *DuPont* Factor No. 2. At the very least, the evidence on this factor presents a genuine issue of material fact, precluding summary judgment.

C. The Parties' Trade Channels Overlap

1. DuPont Factor No. 3 - The Similarity Of Trade Channels

DuPont Factor No. 3 is the "similarity or dissimilarity of established, likely-to-be continued trade channels." *DuPont*, 476 F.2d at 1361.

2. HP's '880 Registration Has No Limitation On Trade Channels

HP's '880 registration has no limitation on channels of trade ("personal computers, computer hardware, computer monitors, computer display screens"). The Board should assume that these goods are sold in all normal channels (and not just the specific channels urged by HP, *e.g.*, "retail stores," HP's Motion at p.11, l. 9).

"It is well settled that in a proceeding such as this, the question of likelihood of confusion must be determined based on an analysis of the mark as applied to the goods and/or services recited in applicant's application vis-à-vis the goods and/or services recited in an opposer's registration, rather than what the evidence shows the goods and/or services to be." *Canadian Imperial Bank of Commerce v. Wells Fargo Bank, N.A.*, 811 F.2d 1490, 1 USPQ2d 1813, 1815 (Fed. Cir. 1987). *See, also, Octocom Systems Inc. v. Houston Computers Services Inc.*, 918 F.2d 937, 16 USPQ2d 1783, 1787 (Fed. Cir. 1990) ("The authority is legion that the question of registrability of an applicant's mark must be decided on the basis of the identification of goods set forth in the application regardless of what the record may reveal as to the particular nature of an applicant's

goods, the particular channels of trade or the class of purchasers to which sales of the goods are directed”).

HP recognizes that “[t]he absence of express limitation in the identification of goods by Nartron and HP creates the presumption that the claimed goods move through all reasonable trade channels.” HP’s Motion at p. 11. Despite this fact, HP’s counsel attempts to distinguish its trade channels, without supporting evidence, and boldly concludes that this factor supports a determination that there is no likelihood of confusion. However, such unsupported arguments should be wholly disregarded. As the following will show, *DuPont* Factor No. 3 presents a genuine issue of material fact regarding the similarity of the parties’ trade channels.

3. HP’s Customers (i.e., “Partners”) Are In Multiple Trade Channels

HP describes its customers as “partners” in its 2008 Form10-K filed with the Securities and Exchange Commission (with boldface added below):

Sales, Marketing and Distribution

...

Our customers are organized by consumer and commercial customer groups, and distribution is organized by direct and channel. Within the channel, we have various types of **partners** that we utilize for various customer groups. The **partners** include:

- retailers that sell our products to the public through their own physical or Internet stores;
- resellers that sell our products and services, frequently with their own value-added products or services, to targeted customer groups;
- distribution **partners** that supply our solutions to smaller resellers with which we do not have direct relationships;
- independent distributors that sell our products into geographies or customer segments in which we have little or no presence;

- original equipment manufacturers ("OEMs") that integrate our products with their own hardware or software and sell the integrated products;
- independent software vendors ("ISVs") that provide their clients with specialized software products, frequently driving sales of additional non-HP products and services, and often assist us in selling our products and services to clients purchasing their products; and
- systems integrators that provide various levels and kinds of expertise in designing and implementing custom IT solutions and often partner with HPS [HP Services] to extend their expertise or influence the sale of our products and services.

Exhibit 3; Washeleski Decl., ¶14, Exh. J.

It is clear that Nartron and HP sell their respective goods through the same channels of trade to the same classes of customers. The record evidence on Factor No. 3 presents a genuine issue of material fact precluding summary judgment.

D. HP's Intent In Selecting The Mark

DuPont Factor No. 13 is: "Any other established fact probative of the effect of use."

The final factor is the catch-all that considers intent and good faith. Indeed, "as a general rule, the factual question of intent is particularly unsuited to disposition on summary judgment." *Copelands' Enterprises Inc. v. CNV Inc.*, 945 F.2d 1563, 20 USPQ2d 1295 (Fed. Cir. 1991); *see also Commodore Electronics Ltd. v. CBM Kabushiki Kaisha*, 26 USPQ2d 1503 (TTAB 1993).

HP's motion fails to address key evidence of record in this proceeding. Specifically, HP's motion ignores Paragraph 9 and Exhibit 2 to the Petition to Cancel, which indicate that HP's use of TOUCHSMART in connection with a computer monitor and display screens is identical to Petitioner's use of SMART TOUCH for electronic sensors. Exhibit 2 to the Petition to Cancel consists of Nartron's specimen of use submitted in conjunction with its application in 1991 and a printout from HP's website.

HP's intent presents a genuine issue of material fact, on which discovery is necessary. Nartron has served Rule 34 requests seeking production of search reports to learn if HP knew of Nartron's rights evidence by the Nartron '891 registration prior to adoption of the TOUCHSMART mark. For example, Request No. 2 seeks: "*Documents relating to any investigation of the availability for use of the mark TOUCHSMART for each of the goods recited in U.S. Registration No. 3,600,880, including searches, search reports, and the like.*" If Nartron's '891 registration appeared on a search report commissioned by HP (which is discoverable), it would be probative of HP's intent in selecting and adopting a mark for similar goods that differs only by transposition of the word elements.

E. Nartron Has Vigorously Defended Its SMART TOUCH Registration Before The Board

Finally, Nartron has brought numerous proceedings before the Trademark Trial and Appeal Board over the past many years in respect of its SMART TOUCH mark of U.S. Reg. No. 1,681,981, all of which were resolved in favor of Nartron. This is evidenced by the "Summary" printout from TTABVUE, attached as Exhibit K to the Washeleski Declaration. Such evidence of Nartron's aggressive trademark enforcement activities reinforce the strength of its mark. See *J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition*, § 11.91 (4th ed. 2005) ("... active program of prosecution of infringers ... enhances the distinctiveness and strength of a mark").

As such, the Board should disregard HP's unsupported contention that SMART TOUCH is not distinctive and entitled to only a narrow scope of protection. HP's Motion at 12 ("SMART TOUCH is not arbitrary or distinctive in the context of Nartron's claimed goods ... [I]t is entitled at most to a narrow scope of protection"). Quite to the contrary, Nartron's record of aggressive enforcement supports a conclusion on this record that Nartron's mark is distinctive and entitled to a relatively broad scope of protection.

III. CONCLUSION

“[I]f there be any doubt on the issue of likelihood of confusion, the familiar rule in trademark cases ... is that it must be resolved against the newcomer or in favor of the prior user or registrant.” *See In re Pneumatiques, Caoutchouc Manufacture et Plastiques Kleber-Colombes*, 487 F.2d 918, 919-920, 179 USPQ 729 (CCPA 1973). Nartron’s registration issued approximately twenty-five (25) years prior to the filing of HP’s application and alleged date of first use. *See King Candy Co. v. Eunice King's Kitchen, Inc.*, 496 F.2d 1400, 182 USPQ 108, 110 (CCPA 1974) (priority is not an issue in an opposition where the opposer makes of record its valid and subsisting registrations). HP is the newcomer. A party entering a field of business has a plethora of possible marks available to him. “A newcomer has both the opportunity and the obligation to avoid confusion.” *Carl Karcher Enterprises, Inc. v. Stars Restaurants Corp.*, 35 USPQ2d 1125, 1133 (TTAB 1995). There is no justification for HP’s selection of a mark likely to cause confusion.

The evidence before the Board on the relevant *DuPont* factors demonstrates the existence of the numerous genuine issues of material fact precluding summary judgment. HP’s summary judgment motion is a litigation maneuver to shield HP from discovery by Nartron on all applicable *DuPont* factors. For this reason, HP’s motion is premature, and should be **DENIED**.

Respectfully submitted,

BROOKS KUSHMAN P.C.

By: 

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Attorneys for Petitioner

Dated: November 4, 2009

CERTIFICATE OF SERVICE

I hereby certify that a true and complete copy of

**PETITIONER'S BRIEF IN OPPOSITION TO
RESPONDENT HEWLETT-PACKARD
DEVELOPMENT COMPANY, L.P.'S
MOTION FOR SUMMARY JUDGMENT**

has been served on November 4, 2009 by:

delivering

mailing (via First-Class mail)

a copy to:

Jeffrey E. Faucette
Diana D. Digennaro
HOWARD, RICE, NEMEROVSKI,
CANADY, FALK & RABKIN
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Attorneys for Respondent



Hope V. Shovein

UNITED STATES PATENT AND TRADEMARK OFFICE
TRADEMARK TRIAL AND APPEAL BOARD

NARTRON CORPORATION

Petitioner,

v.

Cancellation No. 92050789

HEWLETT-PACKARD
DEVELOPMENT COMPANY, L.P.,

Respondent.

DECLARATION OF JOHN M. WASHELESKI
IN SUPPORT OF
PETITIONER'S OPPOSITION TO
RESPONDENT HEWLETT-PACKARD
DEVELOPMENT COMPANY, L.P.'S
MOTION FOR SUMMARY JUDGMENT

JOHN M. WASHELESKI makes the following declaration on personal knowledge, and states that if called to testify as a witness at trial in this matter, he is competent to testify as follows.

1. I have been employed by Nartron Corporation since 1985 in a succession of engineering positions, and am presently Senior Vice President - Engineering.

2. Nartron designs, engineers, develops, manufactures and sells electronic products that "sense-compute-control." These products include electronic proximity sensors and switches that may be integrated with programmable logic devices, including "personal computers, computer hardware, computer monitors, computer display screens."

3. Nartron's flagship product trademark for switches and proximity sensors is "SMART TOUCH."

4. Nartron has used "SMART TOUCH" for "electronic proximity sensors and switching devices," since at least December, 1986. Nartron has obtained U.S. Reg. No. 1,681,891 for the mark "SMART TOUCH" for such goods. (Exhibit A.)

5. A Nartron company brochure listing Nartron's "Capabilities," and listing Nartron's products by application is at Exhibit B.

6. Exhibit C is a "data sheet" for Nartron's "SMART TOUCH" Solid State Sensor System. This product is described on the data sheet of Exhibit C as: "a totally solid state design featuring either touch or proximity actuation" that has no moving parts. This sensor system could readily be adapted to function as an electronic proximity sensor and/or switching

device for HP's "personal computers, computer hardware, computer monitors, computer display screens."

7. The graphic user interface on HP's TOUCHSMART "personal computers, computer hardware, computer monitors, computer display screens," uses embedded capacitors that sense the proximity of a user's finger on the screen to alter electrical circuit properties that implement various system control functions (*e.g.*, switching) . This is explained in the press release from Cypress Semiconductor Corporation, dated May 9, 2007, titled: "Cypress's PSoC® CapSense Enables Touch Sensing Inside HP Compaq Notebook PCs." (Exhibit D.)

8. Nartron is a pioneer in the technology field of capacitive sensing. An example is Nartron's patent U.S. 4,731,548, titled "Touch Control Switch Circuit." (Exhibit E.) The Nartron '748 patent issued on March 15, 1988, based on an application filed on September 29, 1986. Figure 1 of the Nartron '548 illustrates an circuit for providing a touch-controlled electrical switch in which the user's body (*e.g.*, finger) alters the capacitance of the circuit - - just as in the Cypress "CapSense" interface used in HP's TOUCHSMART products.

9. Nartron's SMART TOUCH electronic proximity sensors and switching devices have a wide range of product applications. This is explained in the Nartron data sheet titled "Smart Touch® Keypad Part No. 1310674." (Exhibit F.) The Nartron data sheet explains in relevant part:

Smart Touch ® enables a person to use fingers to control computer software through a display screen. A key feature of Smart Touch ® allows multiple touches simultaneously or sliding fingers across a screen. Applications include the automobile IP [instrument panel], radio and HVAC controls.

10. Two Nartron brochures that illustrate exemplary applications of Nartron's SMART TOUCH products are at Exhibits G and H.

11. The brochure at Exhibit G, titled "Virtual Touchpad," shows application of Nartron's SMART TOUCH products in an automotive window pad control.

12. The brochure at Exhibit H, titled "Connecting you with your vehicle . . .," shows six different applications of SMART TOUCH technology in an automotive environment.

13. HP has a substantial product presence in the automotive industry. This is shown by the HP brochure titled "Improving automotive industry outcomes." (Exhibit I.)

14. Nartron and HP have common customers, based on HP's description of its customers in its 2008 Form10-K filed with the Securities and Exchange Commission (Exhibit J):

Sales, Marketing and Distribution

...

Our customers are organized by consumer and commercial customer groups, and distribution is organized by direct and channel. Within the channel, we have various types of partners that we utilize for various customer groups. The partners include:

- retailers that sell our products to the public through their own physical or Internet stores;
- resellers that sell our products and services, frequently with their own value-added products or services, to targeted customer groups;
- distribution partners that supply our solutions to smaller resellers with which we do not have direct relationships;
- independent distributors that sell our products into geographies or customer segments in which we have little or no presence;

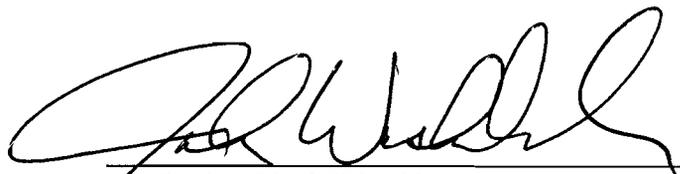
- original equipment manufacturers ("OEMs") that integrate our products with their own hardware or software and sell the integrated products;
- independent software vendors ("ISVs") that provide their clients with specialized software products, frequently driving sales of additional non-HP products and services, and often assist us in selling our products and services to clients purchasing their products; and
- systems integrators that provide various levels and kinds of expertise in designing and implementing custom IT solutions and often partner with HPS [HP Services] to extend their expertise or influence the sale of our products and services.

(HP's 2008 Form 10-K, pp. 7 and 8, Exhibit J.)

15. Nartron has brought numerous proceedings before the Trademark Trial and Appeal Board over the past many years in respect of its SMART TOUCH mark of U.S. Reg. No. 1,681,981, and resolved them all satisfactorily to Nartron. (Exhibit K.)

I hereby declare under penalty of perjury the foregoing is true and correct.

Dated: October ²³, 2009



JOHN M. WASHELESKI

EXHIBIT A

Int. Cl.: 9

Prior U.S. Cl.: 21

United States Patent and Trademark Office

Reg. No. 1,681,891

Registered Apr. 7, 1992

**TRADEMARK
PRINCIPAL REGISTER**

SMART TOUCH

**NARTRON CORPORATION (MICHIGAN CORPORATION)
5000 N. U.S. 131
REED CITY, MI 49677**

**FIRST USE 12-17-1986; IN COMMERCE
1-7-1988.**

SER. NO. 74-168,921, FILED 5-22-1991.

**FOR: ELECTRONIC PROXIMITY SENSORS
AND SWITCHING DEVICES, IN CLASS 9 (U.S.
CL. 21).**

**CORA ANN MOORHEAD, EXAMINING AT-
TORNEY**

EXHIBIT B

CAPABILITIES

NARTRON COMMITMENT TO YOUR PRODUCTS

We all face intense competition.

How we confront this competitive challenge determines our future economic survival.

Over the past 20 years, Nartron has developed a deep commitment and performance capability to help you meet the challenge.

WE ARE COMMITTED TO:

- Product Excellence
- Maximum Quality and Reliability
- Optimum Performance
- Timely Delivery
- Competitive Prices

OUR CAPABILITIES INCLUDE:

- Product Planning
- Specification Support
- Specification Development
- Conceptual Design
- Detailed Design:
 - Electro-Mechanical
 - Mechanical
 - Advanced Electronic Design
- Prototype Development
- Complete Manufacturing and Test Facilities
- Circuit Assembly Design and Fabrication:
 - Through Hole
 - Surface Mount
 - Hybrid

PROVEN OUTSTANDING QUALITY

- AC/Delco Electronics Top Quality Award Winner

As we streak toward the 21st century, the challenge is clear. Success will be a team effort. We at Nartron are committed to our role as a member of your team. We welcome your use of our capabilities as we support your success.

From specification to delivery of product, Nartron does it all!

OUR RESOURCES INCLUDE:

- CAE/CAD to "leverage" engineering effectiveness
- Advanced Engineering Development
- Test System Design and Fabrication
- Computer Aided Project Management
- Statistical Process Control in Manufacturing
- Superior Manufacturing Technology
- "State of the Art" people with a forward lean

OUR PRODUCT EXPERIENCE COVERS:

- Traditional Automotive Products:
 - Relays, Switches, Timers
 - SMART-POWER® Logic Modules
 - Connector and Wire Assemblies
 - Lamp Assemblies
 - Annunciators
- Advanced Electronic Products:
 - Infrared Sensors and Switches
 - Visual Displays:
 - VF, EL, LCD, CRT, Projection
 - Acoustic Displays:
 - Chimes, Buzzers, Tone Generators
 - Voice Synthesizers
 - Voice Recognition
 - Interactive Displays:
 - Self Diagnostic Systems
 - Acoustic and Visuals
 - Control Systems:
 - PWM Linear and Rotary Actuators
 - Engine Controls
 - Remote Controls

NARTRON
CORPORATION

5000 North US-131
Read City, MI 49677
(616) 832-8525

35 West Huron
Pentiac, MI 48658
(313) 332-7734

PRODUCT LISTING BY APPLICATION

Nartron has designed, developed and produced these products for our customers:

SENSORS

- Position, non-contact
- Fluid Level (oil, gas)
- Fluid Flow
- Displacement
- Differential Pressure
- Pressure and Force
- Temperature
- Voltage/Current
- Air Flow
- Speed
- Mechanical Wear
- Ambient Light
- Gear Tooth
- Wheel Speed
- Water (in fuel)
- Rain
- Hail Effect
- Power Seat Position
- Volttron®
- Fuel
- SMART PEDAL™
- Ice

ACOUSTIC

- Buzzers
- Chimes
- Tone Generators
- Electronic Horn
- Ultrasonic Alert
- Voice Synthesizer Modules
- Voice Recognition Modules
- Bark® Alarms
- Buzz-Lite®

DISPLAYS

- Instruments
- Tachometer
- Speedometer
- Vacuum Fluorescent
- L.E.D.
- L.C.D.
- C.R.T.
- Fiber Optic
- Message Center
- Clusters

SPECIAL PRODUCTS

- R.F.I. Filters
- Voltage Regulators
- Fuel Gauge Dampeners
- Fluid Control Valves

ELECTRONIC CONTROLS

- SMART- POWER® Modules
- Brake Lamp Driver Controls
- Speed Controls
- Suspension Controls
- Power Steering Controls
- Transmission Controls
- Engine Controls
- Remote Controls, IR
- Climate Controls
- Seat Positioning Controls
- Collision Prevention Controls
- Intrusion Detection
- Windshield Wiper Controls
- Seat Heater Controls
- Instrument Panel Dimmers
- Drive Train Controls
- Power Jack Train Controls
- Backlight Timer Controls
- Air Pre-heater Controls
- Glo-plug Controls
- Check Gauge Modules
- Timers and Clocks
- Daytime Running Light
- Sun Roof Controls
- Keyless Entry
- Brake Warning
- Microprocessor Controllers
- SMART PEDAL™

CONTROL DEVICES

- MINIPOWER® Relays
- Heavy Duty Relays
- Time Delay Relays
- SMART TOUCH™ Switches
- Sealed Relays
- Actuators, Solenoid
- Actuators, Motor Driven
- Turn Signal Switches
- Push Button Switches
- Solid State Switches
- Knife Switches
- Rear Window Defogger Modules
- Dimmer Switches
- Glove Box Switches
- Power Door Lock Switches
- Power Window Switches
- Trunk Release Switches

HARNESSES AND CONNECTORS

- Wires Harnesses
- Battery Cables
- Molded Connectors
- Terminal Strips
- Precision Terminals
- EMI Protection
- Environment-Proof Connectors

VISUAL

- Tail Lamps
- Panel Lights
- Indicator Lights
- Indicator Lenses
- Glove Box Switch-Lamp
- Visual Alarms/Audible
- Flashers

CAPABILITIES

- Product Planning
- Specification Development
- Conceptual Design
- Detailed Design
- Design and Development
 - Mechanical
 - Electro-mechanical
 - Electronic
 - Micro-processor
 - Analog Circuit
- Circuit Modules
- Design
- Development
- Assembly
- Test and Burn-in
- Custom Semiconductor Design
- Plastic Decorating
- Tooling and Mold Design
- Insert Molding
- Potting, Coating, Encapsulation
- Circuit Emulation
- Coil Winding
- Injection Molding
- Qualification Testing
- Sonic Welding

RESOURCES

- Test Laboratories
- CAE/CAD/CAM
- Computerized Project Management

EXHIBIT C



SMART-TOUCH™ Solid State Sensor System

5000 North US 131 • Reed City, MI 49677 • (616) 832-5525
35 W. Huron • Pontiac, MI 48058 • (313) 332-7794

APPLICATIONS

- The SMART-TOUCH™ System is a breakthrough in switching technology. By combining the reliability and flexibility of solid state electronics with a uniquely designed sensing system, Nartron has created a "new world" of design opportunities.
- Programed multi-level and/or multi-function outputs allow control of: motor speed, lamp intensity, load control and multiple ON/OFF functions.

FEATURES

- SMART-TOUCH™ is a totally solid state design featuring either touch or proximity actuation. No moving parts.
- Senses through glass, plastic, laminates, fabric, vinyl, etc.
- High-density "keyboarding" allows compact control configurations.
- Totally sealed sensing system allows operation at virtually any (non-condensing) humidity level.
- May incorporate multiple-input sensing and automatic shutdown or lockout function.
- SMART-TOUCH™ can operate on AC or DC. Controls resistive as well as inductive loads. The versatile system can control fluorescent fixtures and electric motors.
- SMART-TOUCH™ uniquely lends itself to multiplex systems since its solid-state switching operates at logic levels and can interface directly with electronic controllers.
- Switch function is independent of surface graphics and allows a new level of design freedom since the overlay surface is not part of the switch. Deadfront backlit applications are optional.
- Highly skilled professionals at Nartron are ready to meet any specific applications. Immersed in a creative atmosphere coupled with advanced CAE and CAD, laboratories and simulation systems, we are prepared to design a SMART TOUCH™ System to meet your requirements.

Pats. 4,731,548
4,758,735
4,831,279

Other patents pending.

EXHIBIT D

[Back] [More News] [Home]

Cypress's PSoC(R) CapSense Enables Touch Sensing Inside HP Compaq Notebook PCs

SAN JOSE, Calif.—(BUSINESS WIRE)—May 9, 2007— Cypress Semiconductor Corp. (NYSE: CY) today announced that its PSoC(R) CapSense enables the touch sensing interface inside multiple HP Compaq Notebook PC models. The Cypress CapSense solution not only provides the interface for a smooth, glitch-free user experience, but it also controls LED indicator lights on the notebooks, saving board space and reducing costs.

"We are pleased to provide the CapSense solution to HP, a world leader in notebook computers," said Carl Brasek, business unit director for Cypress's CapSense products. "This usage model highlights one of the CapSense customer benefits -- the ability to perform additional functions on top of capacitive sensing."

"Given HP's focus on delivering easy-to-use and reliable notebook PCs to our business customers, HP is pleased to integrate the CapSense solution, which provides an excellent user experience and is less prone to every day wear and tear than exposed buttons," said Carol Hess-Nickels, director of worldwide business notebook marketing in the Personal Systems Group at HP. "In addition, the CapSense solution enhances the sleek design and superb functionality we're providing to customers."

About CapSense

A single CapSense device can replace dozens of mechanical switches and controls with a simple, touch-sensitive interface. CapSense-based "button" and "slider" controls are more reliable than their mechanical counterparts because they are not prone to the environmental wear-and-tear that affects exposed buttons and switches. Cypress has garnered well over 100 CapSense design wins worldwide in applications that include mobile handsets, portable media players, white goods, computers, printers and automotive, among others.

Capacitive sensing is fast becoming the solution of choice for front-panel display and media control applications. Increased durability, decreased bill of materials (BOM) and a clean, minimalist appearance make this elegant interface attractive to a wide range of designs. With Cypress's CapSense interface, a finger on the interface forms an electrical connection with embedded sensors, which work with the PSoC device to translate data about the finger's presence into various system control functions. The sensor itself is only a copper pad on the PCB, not an actual component. All of the circuitry for controlling the sensor is inside the PSoC device.

Cypress's CapSense solution offers system designers numerous advantages over capacitive sensing products built around modules and sub-assemblies, including increased flexibility, reduced board space and lower cost. Because of the unique PSoC architecture, designers can easily integrate multiple functions (e.g., LED drivers and LCD displays), in addition to capacitive sensing. The PSoC CapSense solution also delivers benefits such as easy communications using either I2C, SPI or USB interfaces, the ability to implement both trackpad (x-y matrix) and linear slider applications with the same device, and the ability to make quick design changes using the flash-based PSoC architecture. In addition, users can complete CapSense designs quickly and easily using pre-configured and verified "user modules" within Cypress's PSoC Designer(TM) 4.4 Integrated Design Environment (IDE). Learn more about CapSense online at www.cypress.com/capsense.

About the PSoC Family

PSoC devices are configurable mixed signal arrays that integrate a fast 8-bit microcontroller with many peripheral functions typically found in an embedded design. PSoC devices provide the advantages of an ASIC without the ASIC NRE or turn-around time. A single PSoC device can integrate as many as 100 peripheral functions with a microcontroller, saving customers design time, board

space and power consumption. Customers can save from 5 cents to as much as \$10 in system costs. Easy to use development tools enable designers to select configurable library elements to provide analog functions such as amplifiers, ADCs, DACs, filters and comparators and digital functions such as timers, counters, PWMs, SPI and UARTs. The PSoC family's analog features include rail-to-rail inputs, programmable gain amplifiers and up to 14-bit ADCs with exceptionally low noise, input leakage and voltage offset. PSoC devices include up to 32KB of Flash memory, 2KB of SRAM, an 8x8 multiplier with 32-bit accumulator, power and sleep monitoring circuits, and hardware I2C communications.

All PSoC devices are dynamically reconfigurable, enabling designers to create new system functions on-the-fly. Designers can achieve far greater than 100 percent utilization of the die, in many cases, by reconfiguring the same silicon for different functions at different times. Learn more about PSoC products at www.cypress.com/psoc and receive free online training at www.cypress.com/psoctraining.

About Cypress

Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the PSoC(R) Programmable System-on-Chip(TM), USB controllers, general-purpose programmable clocks and memories. Cypress also offers wired and wireless connectivity solutions ranging from its WirelessUSB (TM) radio system-on-chip, to West Bridge(TM) and EZ-USB(R) FX2LP controllers that enhance connectivity and performance in multimedia handsets. Cypress serves numerous markets including consumer, computation, data communications, automotive, industrial, and solar power. Cypress trades on the NYSE under the ticker symbol CY. Visit Cypress online at www.cypress.com.

Cypress, the Cypress logo and PSoC are registered trademarks and PSoC Designer is a trademark of Cypress Semiconductor Corp. All other trademarks are property of their owners.

Contact:

Cypress PR
Don Parkman, 408-943-4885
Email Contact

Rating: ★★★★★

EXHIBIT E



5000 NORTH US-131 · REED CITY, MI 49677
(231) 832-5525 · www.natron.com

Smart Touch[®]
Keypad Part No. 1310674

GENERAL DESCRIPTION

Smart Touch[®] sensing is a breakthrough in human interface technology providing direct access to computer power, such as with highly successful handheld devices. By combining the reliability and flexibility of completely solid state sensing along with "Anthrotronic"[™] considerations, capacitive switching interface technology creates new automotive design opportunities.

Smart Touch[®] enables a person to use fingers to control computer software through a display screen. A key feature of Smart Touch[®] allows for multiple touches simultaneously or sliding fingers across a screen.* Applications include the automobile IP, radio and HVAC controls.

FEATURES

- * Smart Touch[®].....
 - 1) unique and patented hardware-software provides under 3 millisecond operations.
 - 2) is a totally solid state design featuring (a) proximity sensing (b) touch implementation inherent within the technology. No moving parts.
 - 3) sense and control through nonconductive covering material such as glass, plastic, wood, etc.
 - 4) may incorporate multiple-input sensing, slewing of touch area, and automatic shutdown or lockout function.
 - 5) can operate on AC or DC. Controls resistive as well as inductive loads. The versatile system can control fluorescent fixtures and electric motors.
 - 6) uniquely lends itself to multiplex systems since its solid-state switching operates at logic levels and can interface directly with electronic controllers.
- * High density "keyboarding" allows compact control configurations
- * Totally sealed system operation at virtually any humidity level
- * Switch function is independent of surface graphics and provides a new level of design freedom since the overlay surface is not part of the switch. Deadfront backlit applications are optional.

Integrated SENSE - COMPUTE - CONTROL[®] Systems

EXHIBIT F

- [54] **TOUCH CONTROL SWITCH CIRCUIT**
- [75] **Inventor:** Ronald D. Ingraham, Quincy, Mich.
- [73] **Assignee:** Nartron Corporation, Reed City, Mich.
- [21] **Appl. No.:** 913,084
- [22] **Filed:** Sep. 29, 1986
- [51] **Int. Cl.⁴** H01H 35/00
- [52] **U.S. Cl.** 307/116; 307/308; 307/632; 200/DIG. 1
- [58] **Field of Search** 307/116, 125, 252, 308; 315/34, 74, 208, 246, 362; 318/345, 446; 323/19, 24; 328/5; 200/DIG. 1

4,159,473	6/1979	Senk	307/116 X
4,210,822	7/1980	Wern	307/116
4,211,959	7/1980	Deavenport et al.	307/308 X
4,213,061	7/1980	Conner	307/116
4,246,533	1/1981	Chiang	307/116 X
4,264,831	4/1981	Wern	307/116 X
4,289,972	9/1981	Wern	307/116
4,289,980	9/1981	McLaughlin	307/308
4,308,443	12/1981	Tucker et al.	307/116 X
4,323,829	4/1982	Witney et al.	307/116 X
4,360,737	11/1982	Leopold	307/116

Primary Examiner—William M. Shoop, Jr.
Assistant Examiner—Sharon D. Logan
Attorney, Agent, or Firm—Price, Heneveld, Cooper, DeWitt & Litton

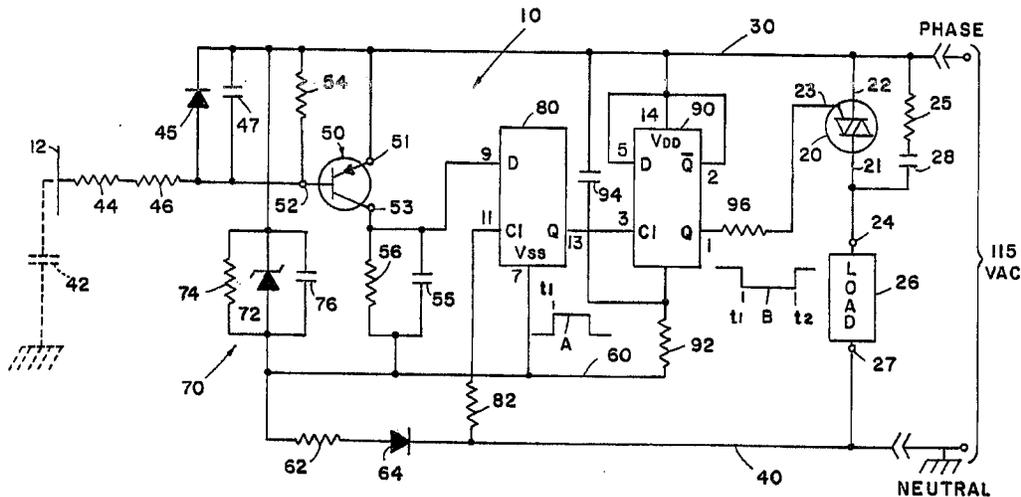
[56] **References Cited**
U.S. PATENT DOCUMENTS

3,549,909	12/1970	Adelson et al.	307/252
3,641,410	2/1972	Vogelsberg	318/345
3,651,391	3/1972	Vogelsberg	318/446
3,666,988	5/1972	Bellis	307/116 X
3,899,713	8/1975	Barkan et al.	307/308 X
3,919,596	11/1975	Bellis	307/308 X
3,965,465	6/1976	Alexander	340/274 R
3,984,757	10/1976	Gott et al.	315/246 X
4,016,453	4/1977	Moennig	307/308 X
4,031,408	6/1977	Holz	307/116
4,101,805	7/1978	Stone	307/308 X
4,119,864	10/1978	Petrizio	307/116
4,152,629	5/1979	Raupp	315/362

[57] **ABSTRACT**

A touch controlled electronic switching circuit in which the body capacitance of the person actuating the device is coupled in series with current limiting resistors and a capacitor with the junction coupled to a logic circuit which responds thereto to provide a direct current control signal. The logic circuit has an output coupled to the gate terminal of a Triac coupled to a load for selectively applying current to said load during both half-cycles of each cycle of the line voltage supplied to the Triac and load.

19 Claims, 1 Drawing Figure



TOUCH CONTROL SWITCH CIRCUIT

BACKGROUND OF THE INVENTION

The present invention relates to an electrical circuit and particularly to a touch controlled electrical switching circuit.

There exists a variety of electrical switching circuits which respond to a person's touch on a touch pad which can be in the form of a lamp base or a specific surface area of an electrical appliance to be actuated. Such circuits represent a convenient manner by which a consumer can easily operate appliances without the need for manually actuating a conventional toggle, push-button or other type switch. Touch controlled electrical switching circuits have become increasingly popular; for example, in use in controlling table lamps, floor lamps and the like although they have other applications as well. U.S. Pat. Nos. 4,119,864 and 4,360,737 are representative of existing touch controlled switch circuits. Typically, such circuits employ the human body as an antenna for picking up 60 Hz radiation existing in an environment by virtue of the line frequency power in the building and utilizes the induced voltage as a trigger signal for controlling the touch controlled electrical circuit. Such systems, however, can suffer from erratic operation due to variations in the nature of the ambient 60 Hz field and the physiological makeup of the person utilizing the system. Also the prior art systems typically utilize a pulse control for controlling a solid-state switch such as a Triac to be conductive only during a portion of each cycle of operation of the AC power supply thereby reducing the efficiency of such systems.

SUMMARY OF THE PRESENT INVENTION

The system of the present invention provides an improved touch controlled electronic switching circuit in which the body capacitance of the person actuating the device is coupled in a voltage dividing circuit employed to provide a logic output signal for controlling a DC trigger level applied to a Triac or other bilateral solid-state switch coupled between the line voltage source and a load to be controlled. In the preferred embodiment of the invention, the body capacitance is coupled in series with current limiting resistors and a second capacitor with the junction coupled to a solid-state switch for providing a control output signal to a logic circuit which responds thereto to provide a direct current control signal. In the preferred embodiment of the invention also, the logic circuit includes a D-flip/flop circuit having its output coupled to the input gate terminal of a Triac for providing a direct current control signal during each half-cycle of each cycle of the line voltage supplied to the Triac and load.

Such a circuit provides improved reliability of operation since it does not rely upon induced voltage for its operation. Further, by utilizing a direct current control signal for the solid-state switch, the Triac switch is rendered conductive near the beginning of each half-cycle of operation and remains conductive during each half-cycle of each cycle of operation. Thus, through a DC gate signal, inductive loads such as fluorescent lights, motors, etc., may be controlled. These and other objects, features and advantages of the present invention can best be understood by reference to the follow-

ing description thereof together with reference to the accompanying drawing in which:

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is an electrical circuit diagram in schematic form of the system of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

In FIG. 1, the electrical circuit 10 for providing a touch controlled electrical switch is shown and includes a touch plate 12 as its control input element which is touched by a person for actuation of the electrical switching circuit. The switching circuit includes a bidirectional solid-state switch 20 such as a Triac having one power terminal 21 coupled to the one side of the typically 115 volt 60 Hz AC supply line 30 and its remaining power terminal 22 coupled to one terminal 24 of a load 26 to be controlled. The remaining terminal 27 of the load is coupled to the line neutral conductor 40. A series spike suppression resistor 25 and capacitor 28 are coupled across the Triac 20 to prevent false turn-on.

The circuit 10 may include a plug which connects directly into, for example, a wall socket to provide connections for lines 30 and 40 to the building's wiring system and a socket for receiving terminals 24 and 27 of a load 26 such as a lamp to be controlled. The circuit 10 may be built directly into, for example, a base or other mechanical structure associated with a lamp or other appliance and wired directly as shown in FIG. 1 with a plug for plugging directly into a power outlet of the building's power supply system.

The touch plate typically is a conductive element which is insulated from the remaining body or the like of a lamp base or other appliance and is in a location readily accessible by the user. The user's body includes a capacitance portion represented by capacitor 42 in FIG. 1 which may range in a typical person from between 100 to 300 picofarads. When a person touches touch plate 12, this body capacitance is coupled to a series voltage dividing circuit coupled to the AC supply and including at least one other capacitor 47. The touch plate or terminal 12 is coupled to one terminal of a first resistor 44 serially coupled to a second resistor 46 having its terminal remote from resistor 44 coupled to the base terminal 52 of a solid-state switch 50 comprising a PNP transistor. Base 52 is also coupled to line supply conductor 30 by a first diode 45 having a cathode coupled to the conductor 30 and an anode coupled to base terminal 52. Capacitor 47 is also coupled between base terminal 52 and line 30 and is coupled effectively in series with body capacitor 42 to form a capacitive voltage divider including series resistors 44 and 46 between conductor 30 and ground which also corresponds to the ground conductor 40 of the building's supply line. The emitter terminal 41 of transistor 50 is coupled directly to conductor 30 while the collector terminal 53 is coupled to a capacitor 55 coupled in parallel with resistor 56 and having their terminals remote from collector terminal 53 coupled to a negative DC supply conductor 60 which is coupled to the neutral or ground conductor 40 through a resistor 62 and series coupled rectifier diode 64 as shown in FIG. 1.

Transistor 50 is biased in a normally nonconductive state by a resistor 54 coupled between base terminal 52 and emitter terminal 51 such that in the absence of body capacitance 42, transistor 50 will be nonconductive and capacitor 55 will be discharged by bleeder resistor 56

such that the output signal present at collector terminal 53 of transistor 50 will be a logic zero or low level. This input circuit thus will provide a first control output signal which is at a logic low level when plate 12 is not touched and a second level or logic high level when the plate 12 is touched. The touching of plate completes an AC voltage divider between line 30 and 40 including series capacitors 47 and 42 with resistors 44 and 46 serially. Thus with the presence of capacitor 42, the AC voltage at the base 52 of transistor 50 during the positive half-cycles of the line voltage will be decreased to forwardly bias the emitter-to-base junction thereby rendering transistor 50 conductive. The collector current thus charges capacitor 55 to provide a positive voltage level or logic "1" output signal for application to circuit 80.

Resistors 44 and 46 should each have a resistance of at least 1 megohms, and in the preferred embodiment of the invention, each have a value of 4.7 megohms which provides isolation between touch plate 12 and supply line 30 so that no harmful electrical current can be supplied to a person touching plate 12. Two serially coupled resistors are employed in the unlikely event that one resistor could short out, the second resistor continues to provide protection for the user of the circuit. Capacitor 47 was a 0.01 Mfd capacitor in the preferred embodiment. Diode 45 prevents the base-to-emitter junction of transistor from being subjected to reverse breakover voltages.

A 15 volt DC power supply 70 is included within circuit 10 for providing power to the logic circuits 80 and 90. Supply 70 includes resistor 62 and diode 64 and a voltage regulator circuit including a 15 volt Zener diode 72 coupled in parallel with a resistor 74 and capacitor 76. One terminal of this parallel combination is coupled to conductor 30, as shown, while the remaining terminal is coupled to DC supply conductor 60 which applies a negative 15 volt DC for the logic circuit now described.

The logic circuit coupled to transistor 50 and to the gate terminal 23 of Triac 20 comprises a two-stage commercially available 4013B integrated circuit having one half coupled as a squaring circuit 80 and the second half coupled as a conventional D-flip/flop circuit 90. The terminal identification numbers on circuits 80 and 90 are the standard commercial identification numbers of the integrated circuit.

The squaring circuit 80 responds to positive going 60 Hz clock pulses from conductor 40 through current limiting resistor 82 which pulses are applied to the clock input terminal 11 of the circuit. The squaring circuit also receives the control signal from the collector of transistor 50 present across resistor 56 which is applied to input terminal 9 which is the D input of the circuit. Circuit 80 responds to a positive signal on input 11 when body capacity 42 is present to provide a positive pulse at the Q output terminal 13. This signal is shown by waveform A in the FIG. and has a pulse width corresponding generally to the length of time plate 12 is touched. Pulse A is applied to input terminal 3 of circuit 90 which has its SET terminal 6 coupled to conductor 60 through resistor 92 and to conductor 30 through capacitor 94 such that when initial power is turned on, this voltage divider holds the SET terminal in a high state assuring that the Q output at terminal 1 remains high and therefore the Triac 20 which is coupled to the Q output terminal 1 of circuit 90 through resistor 96 remains nonconductive when power is initially applied to the circuit. The D and \bar{Q} terminals 5 and 2, respec-

tively, of circuit 9 are intercoupled, while terminal 14 (V_{DD}) of circuit 90 is coupled to line 30 as seen in the FIGURE.

OPERATION

Having described the components and their interconnection to form the circuit of the present invention, a description of a cycle of operation is now presented. As noted above, when power is initially applied to the circuit and there is no body capacitance 42 in the circuit, the biasing of the SET terminal of D-flip/flop 90 will maintain the Q output high and therefore the Triac 20 in the nonconductive state. When touch plate 12 is touched thereby adding capacitance 42, as noted earlier, transistor 50 is rendered conductive during the positive half-cycles of each cycle of the AC supply line voltage, thereby charging capacitor 55 and providing a positive output signal indicated by waveform A in the FIGURE at the Q output 13 of squaring circuit 80. This signal is applied to the clock input terminal 3 of D-flip/flop 90 causing the output terminal 1 to switch to the state of terminal 5 which on initial power up was at the low level. Thus, when plate 12 is first touched at a time t_1 , a negative pulse indicated by waveform B in the FIGURE will be applied to the Triac 20 rendering it conductive and illuminating lamp 26 or applying power to whatever appliance is coupled to terminals 24 and 27.

When the user removes contact with touch plate 12, transistor 50 is nonconductive and capacitor 55 discharges through resistor 56; however, the D-flip/flop 90 is latched and output 1 remains at a direct current low level and the Triac 20 remains conductive during each half-cycle of each cycle of the applied line frequency voltage. The next time, however, touch plate 12 is touched, generating a second positive pulse on input terminal 9 of squaring circuit 80, a second positive pulse also indicated by waveform A is applied to terminal 3 of circuit 90. The flip/flop circuit 90 responds to change states and provide a positive going edge to waveform B indicated at time t_2 in the Figure, thereby turning the Triac 20 off and extinguishing lamp 26. Thus, alternate touches of plate 12 will cause flip/flop 90 to change states for providing the control pulse to the Triac 20. Waveform B provides a continuous DC signal as opposed to alternate half-cycle pulses thereby rendering the Triac conductive during the entire cycle of line frequency voltage applied between conductors 30 and 40 which efficiently provides power to lamp 26. A suitable adjustable time delay and reset circuit can be coupled between the squaring circuit 80 and triac 20 to provide an adjustable duty cycle of power to load 26.

The circuit of the present invention therefore provides a relatively inexpensive and efficient circuit in which operation is improved by providing an AC voltage dividing network including the body capacitance as a controlled element and a DC control signal for the gate of a bidirectional switch such as a Triac. The system utilizes a minimum of components with safety features for protecting the user. It will become apparent to those skilled in the art that various modifications to the preferred embodiment of the invention can be made without departing from the spirit or scope thereof as defined by the appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A touch controlled electric switching circuit comprising:

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a source of power for the actuation of a load to be selectively coupled to said source of power;
 a controllable means for selectively coupling said source to a load; and

a control circuit including a series voltage divider input circuit including at least one capacitor having a first terminal connected to said source of power and an input touch terminal for coupling a person's body capacitance in series with said at least one capacitor such that the voltage across said one capacitor produced by said source of power is changed when said input touch terminal is touched and said control circuit provides a control output signal in response to the touching of said touch terminal which signal is applied to said controllable means for selectively coupling said source of power to said load.

2. The circuit as defined in claim 1 wherein said source of power is an alternating current source and wherein said controllable means comprises a first solid-state switch.

3. The circuit as defined in claim 2 wherein said input circuit is coupled to said source of power and includes resistance means coupled in series between said touch terminal and said at least one capacitor.

4. The circuit as defined in claim 3 wherein said resistance means comprises a pair of serially coupled resistors each having a resistance of at least 1 megaohm.

5. A touch controlled electric switching circuit comprising:

a source of power for the actuation of a load to be selectively coupled to said source of power;

a controllable means for selectively coupling said source to a load; and

a control circuit including a series voltage divider input circuit including at least one capacitor and an input touch terminal for coupling a person's body capacitance in series with said at least one capacitor such that the voltage between said one capacitor and said touch terminal is reduced when touched and said control circuit provides a control output signal in response to the touching of said touch terminal which signal is applied to said controllable means for selectively coupling said source of power to said load, wherein said source of power is an alternating current source and wherein said controllable means comprises a first solid-state switch, wherein said input circuit is coupled to said source of power and includes resistance means coupled in series between said touch terminal and said at least one capacitor, wherein said resistance means comprises a pair of serially coupled resistors each having a resistance of at least 1 megaohm and, wherein the junction of said at least one capacitor and said resistance means is coupled to a control terminal of a second solid-state switch coupled to said power source and responsive to the change in capacitance and resulting voltage change at said junction to provide a controlling signal.

6. The circuit as defined in claim 5 wherein said control circuit further includes a logic circuit having an input terminal coupled to said second solid-state switch and output terminal coupled to said first solid-state switch, said logic circuit latching in response to successive controlling signals for providing said control output signal.

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7. The circuit as defined in claim 6 wherein said logic circuit comprises a squaring circuit serially coupled to a D-flip/flop circuit.

8. A touch controlled electric switching circuit comprising:

a source of alternating current power for the actuation of a load to be selectively coupled to said source;

a first solid-state switch for selectively coupling a load to said source and having a control input terminal for receiving control signals; and

a control circuit including a touch plate responsive to the touch of an individual to provide a direct current control output signal applied to said control input terminal such that said first switch is rendered conductive during each half-cycle of each cycle of applied alternating current voltage, wherein said control circuit includes a series voltage divider input circuit including said touch plate and at least one capacitor having a terminal remote from said touch plate connected to said source of alternating current power for coupling a person's body capacitance in series with said at least one capacitor and said source of alternating current power such that said control circuit responds to the change in voltage across said one capacitor to selectively provide said direct current control signal.

9. The circuit as defined in claim 8 wherein said input circuit is coupled to said source of power and includes resistance means coupled in series between said touch plate and said at least one capacitor.

10. The circuit as defined in claim 9 wherein said resistance means comprises a pair of serially coupled resistors each having a resistance of at least 1 megohm.

11. A touch controlled electronic switching circuit comprising:

a source of alternating current power for the actuation of a load to be selectively coupled to said source;

a first solid-state switch for selectively coupling a load to said source and having a control input terminal for receiving control signals; and

a control circuit including a touch plate responsive to the touch of an individual to provide a direct current control output signal applied to said control input terminal such that said first switch is rendered conductive during each half-cycle of each cycle of applied alternating current voltage, wherein said control circuit includes a series voltage divider input circuit including at least one capacitor and said touch plate is coupled to said at least one capacitor for coupling a person's body capacitance in series with said at least one capacitor such that said control circuit selectively provides said direct current control signal, said source of power and includes resistance means coupled in series between said touch plate and said at least one capacitor, wherein said resistance means comprises a pair of serially coupled resistors each having a resistance of at least 1 megaohm and, wherein the junction of said at least one capacitor and said resistance means is coupled to a control terminal of a second solid-state switch coupled to said power source and responsive to the change in capacitance and resulting voltage change at said junction to provide a controlling signal.

12. The circuit as defined in claim 11 wherein said control circuit further includes a logic circuit having an

input terminal coupled to said second solid-state switch and output terminal coupled to said first solid-state switch, said logic circuit latching in response to successive controlling signals for providing said control output signal.

13. The circuit as defined in claim 12 wherein said logic circuit comprises a squaring circuit serially coupled to a D-flip/flop circuit.

14. A touch controlled electrical switching circuit for controlling power applied to a load, said circuit comprising:

a solid-state switch and means for coupling said switch between a load to be controlled and a supply of electrical power, said switch having a control input terminal; and

a control circuit including an input circuit and a logic circuit for receiving tactile command information from an operator and for providing a control output signal applied to said control input terminal of said solid-state switch, wherein said input circuit includes a touch terminal coupled to at least one capacitor having a terminal remote from said touch terminal coupled to the supply of power to define a voltage divider circuit with a person's body capacitance, said input circuit further including resistance means coupled in series with said touch terminal and said capacitor for limiting current to said touch terminal and voltage level responsive means responsive to said voltage divider circuit for causing said logic circuit to change the state of said control output signal.

15. A touch controlled electrical switching circuit for controlling power applied to a load, said circuit comprising:

a solid-state switch and means for coupling said switch between a load to be controlled and a supply of

electrical power, said switch having a control input terminal; and

a control circuit including an input circuit and a logic circuit for receiving tactile command information from an operator and for providing a control output signal applied to said control input terminal of said solid-state switch, wherein said input circuit includes a touch terminal coupled to at least one capacitor having a terminal remote from said touch terminal coupled to the supply of power to define a voltage divider circuit, said input circuit further including resistance means coupled in series with said touch terminal and said capacitor for limiting current to said touch terminal, wherein said input circuit further includes a second solid-state switch having a control input terminal coupled to said touch terminal and to the supply of operating power and responsive to the touching of said touch terminal for changing state.

16. The circuit as defined in claim 15 wherein said control circuit further includes a logic circuit including a latching circuit having an output terminal coupled to said control input terminal of said first named solid-state switch.

17. The circuit as defined in claim 16 wherein said resistance means comprises a pair of serially coupled resistors each having a resistance of at least 1 megohm.

18. The circuit as defined in claim 17 wherein said logic circuit includes a squaring circuit coupled to said latching circuit and said latching circuit comprises a D-flip/flop circuit.

19. The electrical circuit as defined in claim 18 wherein said first named solid-state switch comprises a Triac.

* * * * *

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 4,731,548
DATED : March 15, 1988
INVENTOR(S) : Ronald D. Ingraham

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2, line 56:

"terminal 41" should be --terminal 51--

Column 2, line 64:

"shwon" should be --shown--

Column 4, line 56:

"controlled" should be --controlling--

Column 6, claim 8, line 4:

"electric" should be --electronic--

Column 6, claim 11, line 55:

After "control signal" insert --wherein said input circuit
is coupled to--

Signed and Sealed this
Twenty-fifth Day of October, 1988

Attest:

DONALD J. QUIGG

Attesting Officer

Commissioner of Patents and Trademarks

EXHIBIT G

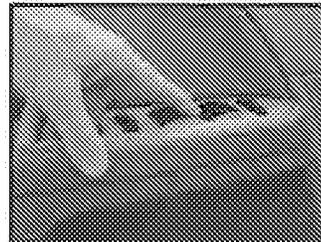
Virtual Touchpad™

Smart Touch® sensing.....

A simple touch and sliding motion across a selected window pad controls both opening and closing.*

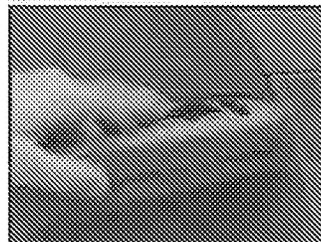
Manual operation:

Slide finger from front to rear (window down) or rear to front (window up) and hold until desired window position is achieved, then release.



Express operation:

Slide finger from front to rear (express down) or rear to front (express up) and remove finger from touchpad.

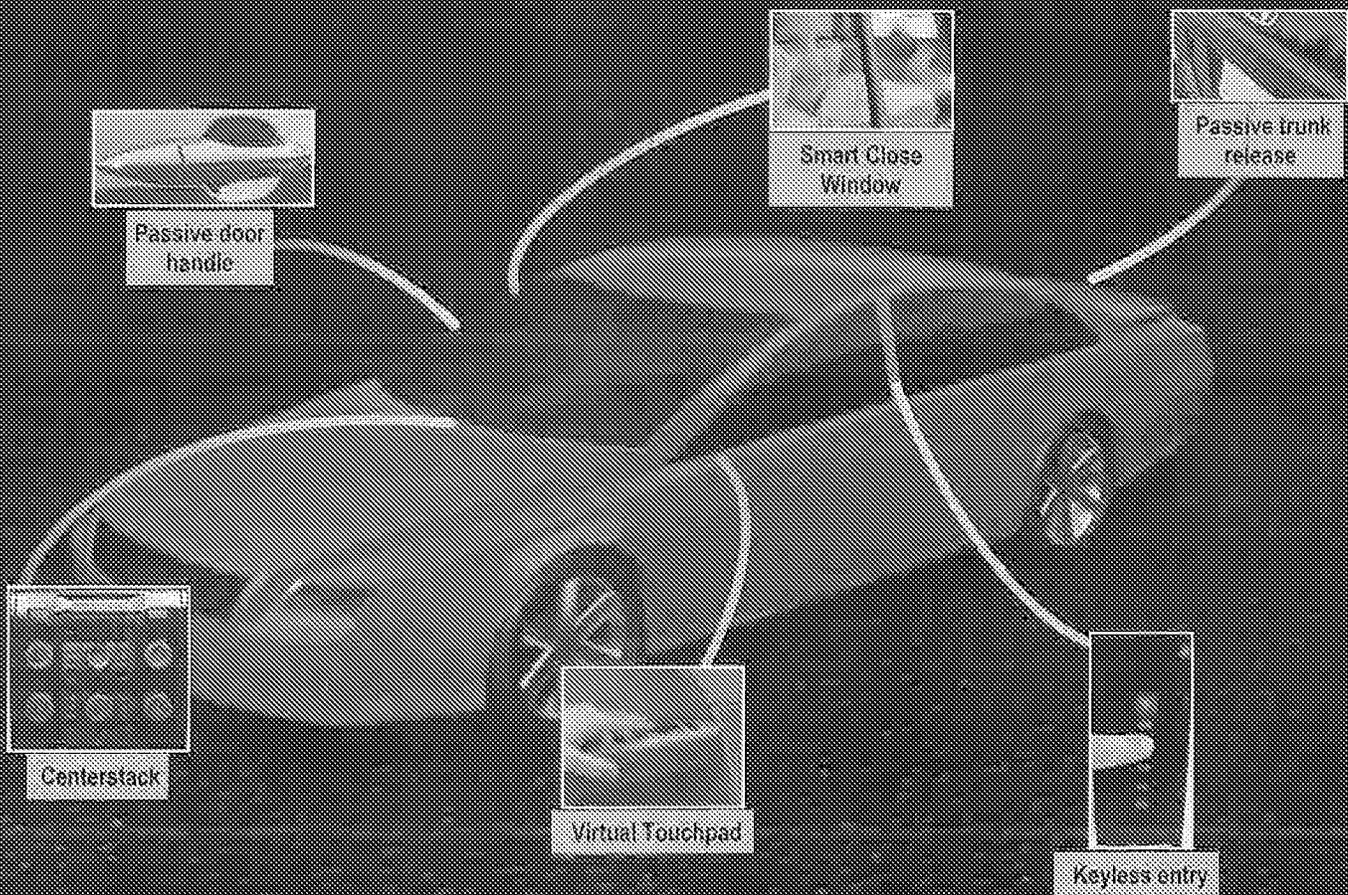


* pioneered and patented by Nartron Corporation

EXHIBIT H

Connecting you with your vehicle...

by using intuitive gestures with the ***Touch*** of a finger to operate controls



Smart Touch[®] systems are intuitive, easy-to-use and able to provide a variety of functions while driving. This helps our customers concentrate on the road, while the safety of their passengers is ensured. Our systems can be tailored to fit any customer's specific needs.

Key features of Smart Touch technology

- MPA (multi-point activation; proximity or touch) provides zoom-in and zoom-out interactive displays
- Each sensor can accept multiple finger pinching, spreading, static and direction inputs, touch, hold, slide
- Sensing through multiple materials including gloves, plastics, metallic paint, etc.
- Differentiates various substances such as lotion, water, etc. to only allow intended human touch
- Surfaces may be curved, contoured or flat
- Changing switch appearance does not require retooling

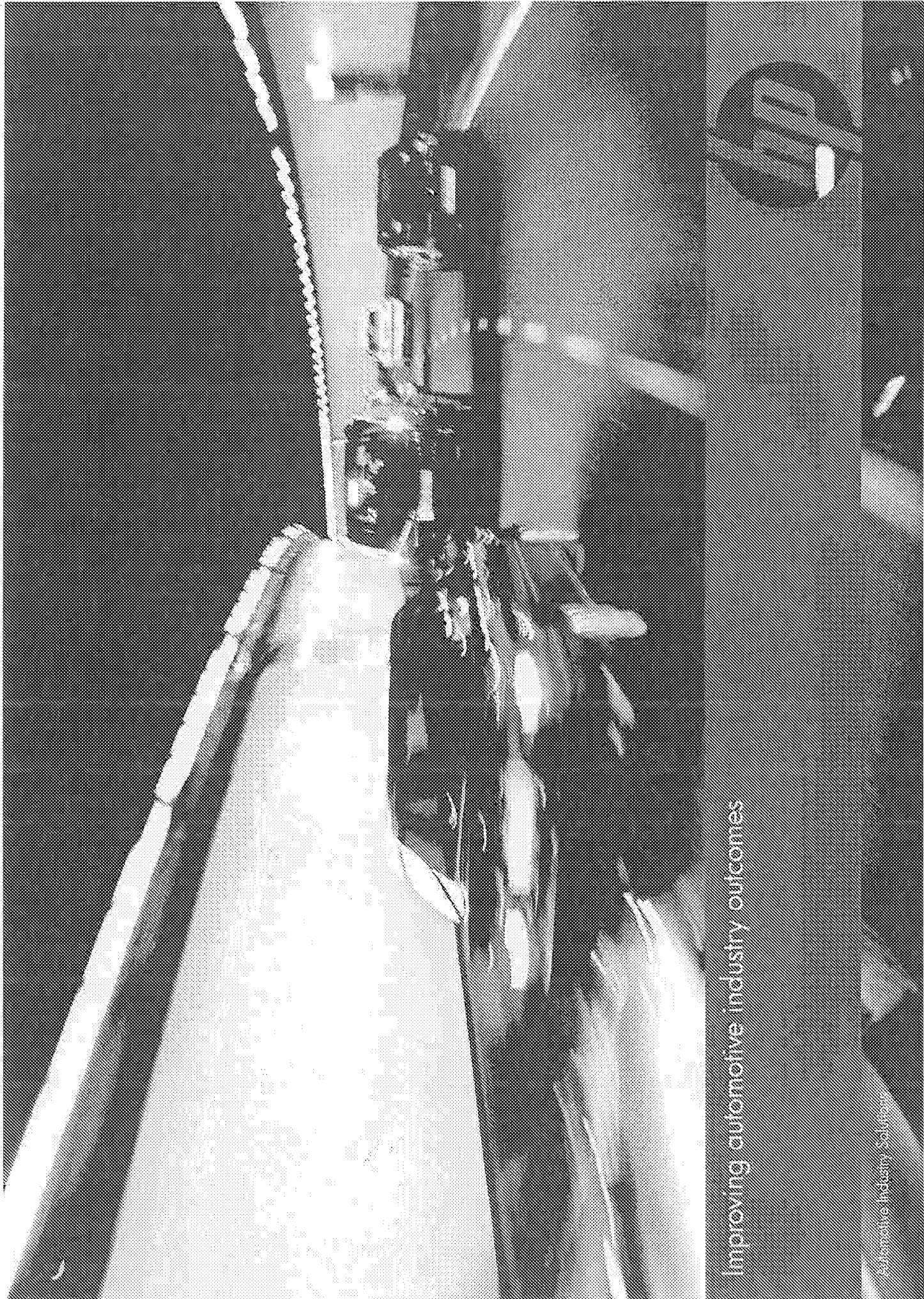
smart ***Touch*** . . . the world at your fingertips

NARTRON
CORPORATION

"AMERICA'S TOP 50 INNOVATOR"

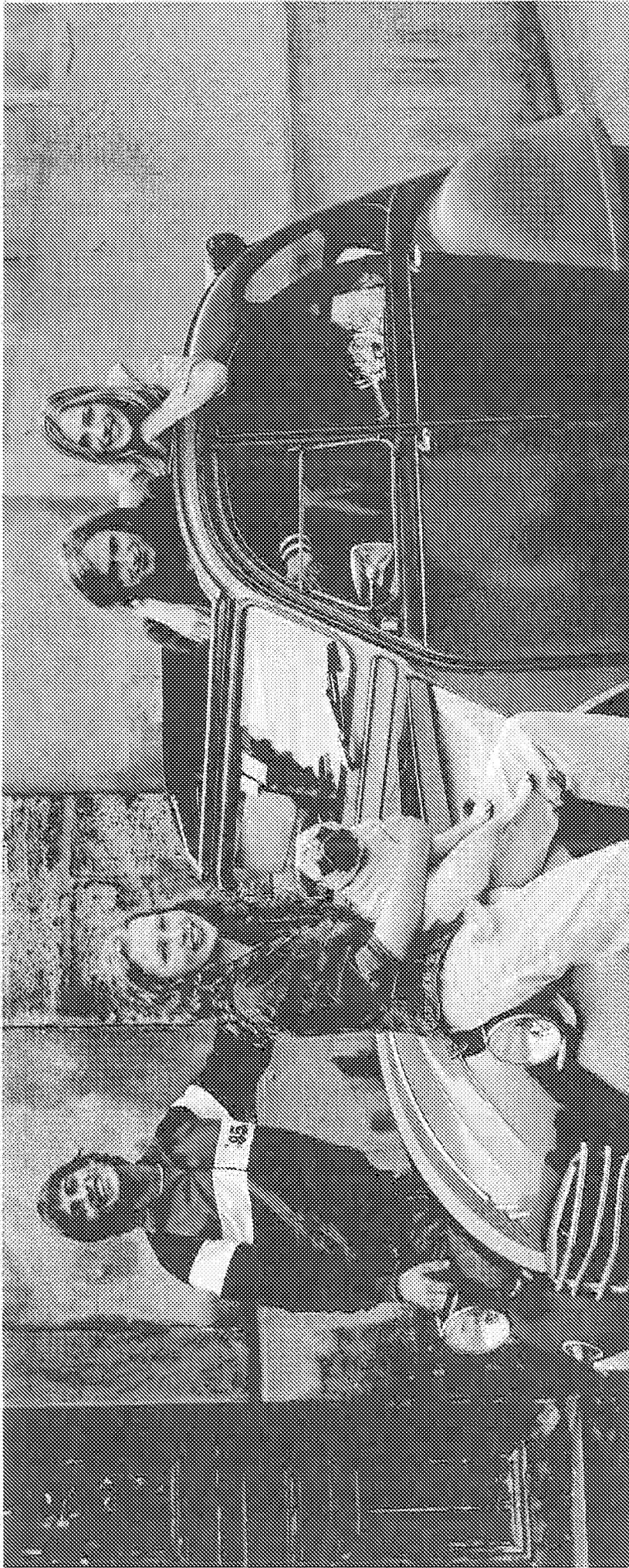
231.832.5525 5000 N. US 131 Reed City, MI 49677

EXHIBIT I



Improving automotive industry outcomes

Automotive Industry Solutions



Decision-makers at automotive OEMs and Tier 1 suppliers are at a crossroads for the future of their companies. Excess capacity and ferocious competition, especially from low-cost entries into the global marketplace, are pressuring the bottom line and forcing a major re-evaluation of where margins can be increased, costs controlled, and market share gained or at least stabilized. Supply chains are growing more complex, and many OEMs find themselves unable to quickly meet market demands due to poor visibility into supply and demand chain dynamics, inflexible infrastructure and lack of common global business processes throughout their supply ecosystems. At the same time, empowered consumers expect more vehicle choices, a wider range of features, and better overall quality from the vehicles they purchase—all while demanding excellent fiscal value. They also want innovation, from rapidly refreshed or fully redesigned body styles to vehicle management systems and in-vehicle electronics that allow drivers and passengers to stay connected in more ways than ever before.

HP recognizes the industry challenges, and has identified where innovative business technology and proven best practices offer automotive manufacturers and their suppliers opportunities to improve collaboration, nurture innovation and drive efficient execution across their extended operations. The end-to-end HP automotive industry portfolio includes complete solutions as well as specific business technology capabilities that range from data management to product lifecycle management, supply chain visibility and optimization to high performance computing solutions for design simulations, logistics and customer service to warranty management, and more. Just as importantly, HP has broad and deep experience in developing and implementing modular, standards-based technology solutions for automotive manufacturers worldwide, as well as proven global delivery capabilities that reduce the risks and time frames for deployment and integration.

HP for automotive

HP technology and services are used by virtually all leading automotive manufacturers and their suppliers worldwide. Continuing this tradition of delivering world-class business technology for automotive manufacturing, HP, along with its partners, continues to drive research into the solutions, capabilities, tools and technologies that help automakers and their suppliers achieve the business outcomes they seek. HP services address three imperatives for the automotive marketplace:

- **Innovation**

More than ever, innovation is the key to growing revenue and market share in a crowded marketplace. HP business technology helps streamline the product development process and shorten the time from concept to delivery. HP data management capabilities deliver a “single version of the truth” to all players along the value chain, making it easier to develop and migrate innovative features across the model line; HP product lifecycle management capabilities cut the development cycle by removing the technology barriers between designers and suppliers; and HP high-performance computing solutions control costs by enabling modeling simulations and other product design operations to run faster and with less drain on design resources.

- **Collaboration**

Automotive manufacturing is a deeply collaborative process; there’s a strong emphasis on working with other OEMs and auto suppliers to develop alternative fuel vehicles, new power train designs and in-vehicle electronics. HP capabilities and services speed collaboration for everything from new model development and assembly to logistics and warranty management, even across heterogeneous infrastructure and diverse geographies. Supply chain visibility solutions from HP improve transparency and accountability between suppliers and manufacturers; HP Halo studios effectively dissolve distance to bring engineers together no matter where in the world they are; and standards-based business intelligence and data warehousing capabilities from HP support common business processes across the enterprise, enabling faster sharing of accurate data between the design shop, the factory floor and the executive decision-makers.

The success of HP supply chain strategy is proven every day.

HP operates one of the world’s largest global supply chains. Since late 2005, the optimization of the HP internal supply chain through best practices and technology deployments have brought dramatic improvements, including \$3 billion in operational savings.

- **Execution**

Cost pressures make operational excellence a necessity for today’s automotive companies. HP capabilities in areas such as data center consolidation and application modernization help companies increase asset utilization, enhance infrastructure reliability and improve efficiencies all across the organization, which can lead to significant savings that can then be reinvested toward innovation. Whether companies need to implement radio frequency identification (RFID) technologies capabilities to track spare parts for assembly or warranty management, or manufacturing execution systems to coordinate activities on the assembly line, HP has proven, low-risk solutions and best practices that decrease costs, improve reliability and availability, and help improve execution across the global manufacturing environment.

Solutions and services from HP are designed to help spur top- and bottom-line revenue growth, reduce costs and control risk. These solutions are based upon HP Manufacturing Industry Reference Architecture (MIRA), a service-oriented architecture (SOA) that provides a unified, structured and consistent framework for constructing an explicit bridge or “line of sight” between IT and the desired business outcomes. Areas of expertise include:

- Product development
- Manufacturing and quality control
- Sales, service and parts
- Supply chain and business services
- Enterprise infrastructure



Product development

The message to automakers is clear—deliver exciting and engaging new products to market quicker, at an optimal price and with outstanding quality. To help automakers achieve these positive business outcomes, HP offers a range of innovative business technologies and services that builds excellence in the product development process from end to end.

Some key HP solution and capability areas for automotive product development include:

- **Master data management/information lifecycle management for automotive**
To large extent, automotive design and manufacturing have become data-driven industries. OEMs and Tier 1 suppliers are increasingly inundated with data streaming from across the enterprise, from collaborative partners, suppliers and customers. Thousands of categories of data may need to be analyzed, shared and managed. Companies that are able to successfully turn this data into actionable insight will gain competitive advantage.

HP master data management (MDM) capabilities address acquisition, management and integration of data from across today's global automotive manufacturing supply and demand chains. A unified strategy is applied for the three phases of data management—capture, storage and distribution—for improved accuracy, accessibility and cost-effective control over the data. By helping automotive manufacturers arrive at a "single version of the truth," HP Master Data Management solutions enable faster, more informed decision-making across the extended automotive enterprise. HP information lifecycle management (ILM) solutions are designed to reflect that the business value of data changes over time. HP ILM solutions migrate data to lower-cost storage as appropriate, saving money while enabling the data to remain available as needed for optimal business decisions.

- **Product lifecycle management (PLM)**

Production runs for many vehicle models are becoming significantly shorter, with more buyers looking for customized configurations or niche vehicles that better fit their specific commercial requirements or personal lifestyles. These shorter product lifecycles are stressing the capabilities of legacy processes, infrastructure and applications, demanding greatly enhanced collaboration between product designers, parts and subassembly contractors, and all value chain partners who may be scattered around the globe.

Drawing upon a repository of field-proven best practices and standards-based, modular components that easily integrate with existing infrastructure, HP can design and implement a next-generation PLM strategy that can help companies respond faster to new market opportunities. The HP PLM portfolio includes:

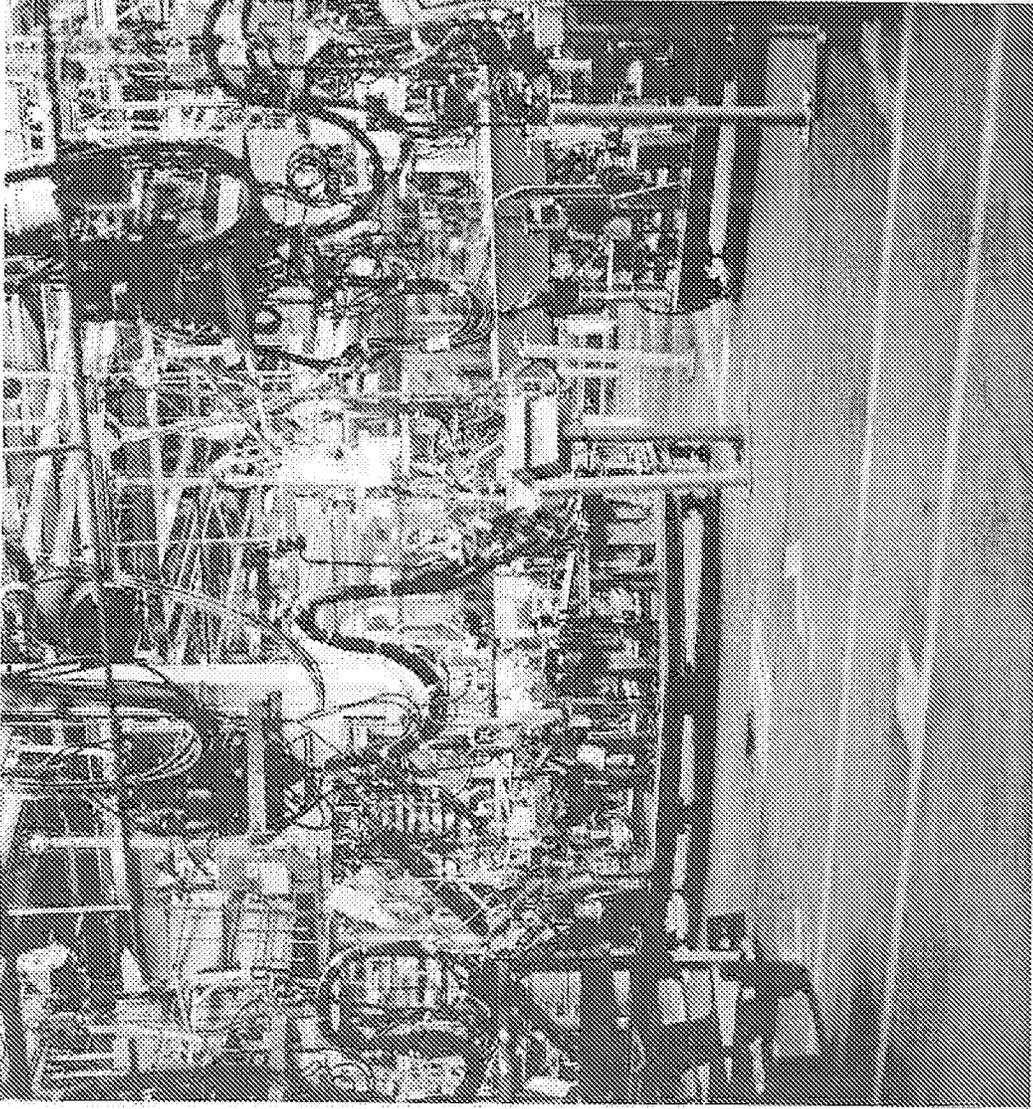
- **HP Product Lifecycle Management Appliance**, a scalable solution featuring hardware, software and services that promote secure data consolidation and management for seamless remote collaboration. By enhancing the speed and accuracy of data management and transfer, new product design windows can be shortened.
- **HP Product Lifecycle User Simulation (PLUS)**, a simulation environment for testing product development processes featuring workshops and data modeling tools that help demonstrate the benefits and potential pitfalls of the initiative before full roll out occurs. This environment also establishes a foundation for the development and launch of maintenance and future services.
- **HP Software for PLM** allows comprehensive management, monitoring and testing for the end-to-end PLM environment. PLM depends on a stable, reliable, high-performance infrastructure for optimal availability and response. HP business technology optimization (BTO) products enable IT to manage the end-to-end PLM environment, increase application performance and availability and optimize PLM infrastructure through automated maintenance and testing.

- **High-performance computing for the automotive industry**

HP provides a portfolio of high-performance computing solutions that help product design teams improve productivity, collaboration and design validation capabilities. High-speed visualization tools allow design teams to construct, test and modify simulated models rather than time-consuming clay models. Offerings span low-cost single-CPU systems to high-end, switched-mode power supply systems and clustered computing solutions comprising hundreds of nodes and thousands of processors and multiple operating environments, as well as fully managed, on-demand computing resources.

- **Halo Studio**

Geographically-dispersed automotive companies and their suppliers must collaborate efficiently across the entire ecosystem. HP Halo Studios help companies work together around the world without ever leaving the office by allowing meeting participants to transparently share charts, diagrams and schematics across the highly secure Halo Video Exchange Network, a dedicated, delay-free fiber-optic network. Halo Studios allow companies to collaborate globally, which translates into quicker release of new models at lower cost and reduces the need for, or the impact of, engineering changes.



Manufacturing and quality

Central challenges for manufacturing and quality control include enhancing flexibility to handle multiple models on a single assembly line, integrating diverse systems, increasing the commonality of processes and systems, and ensuring consistent product quality across geographically and culturally diverse global manufacturing operations. Business technology systems need to be integrated, secured and made more reliable and available.

HP can quickly construct complete, end-to-end solutions comprised of modular, off-the-shelf components that produce rapid return on investment. Proven, standards-based HP business technology components and services enhance execution by tying together enterprise resource management, product lifecycle management, supply chain and other systems into a cohesive whole. These capabilities improve visibility and control over business information, enabling better execution of business processes and encouraging optimal business outcomes.

Key HP capabilities and solution areas for manufacturing and quality include:

- **Manufacturing execution systems**

HP offers system integration and high-performance data management strategies and technical capabilities, including providing seamless integration and connectivity for equipment and IT systems on the factory floor with enterprise-level applications and executive dashboards for real-time visibility of key performance indicators. This integration at the factory floor level minimizes downtime and maximizes production output.

- **Secure, high-availability infrastructure**

HP solutions, components and services utilize high-availability, massively scalable infrastructure that has been pre-tested and pre-integrated for greater uptime under demanding conditions. Unified infrastructure management improves control over heterogeneous operating environments and applications, while energy-efficient consolidation and virtualization strategies concentrate computing density and reduce the costs of operations and maintenance. Proactive HP security strategies help certify that data remains safe and available for all business needs, as well as environmental and regulatory requirements.

- **Cross-enterprise integration**

The move toward producing more vehicle models, but fewer units per model, means that manufacturers need greater flexibility. That requires integration across multiple enterprise systems, from assembly scheduling systems to workstation management systems to ERP systems. HP integration experts draw upon proven business technologies, such as Collaborative Business Infrastructure delivered in partnership with Microsoft®, as well as best practices to integrate data sources on the factory floor with factory-wide applications and within the overall enterprise and supply chain applications. Such cross-enterprise integration drives continuous process improvements that can enhance execution, reduce costs, shorten the time to deliver in-demand or assemble-to-order products to the dealer at the right time.

Sales, service and parts

Total customer satisfaction depends on customer's dealer experience, product excellence and after-sales service. In addition to customer satisfaction, OEM profitability is impacted greatly by the effectiveness of its demand service chain. HP business technology capabilities can support automotive sales and customer service professionals worldwide by providing linkage between dealer, OEM, logistic providers, service providers and the consumer. These linkages provide sales, marketing, service, spare part division and the OEM designers with current, accurate information so that they can better serve their customers.

Key HP capabilities areas for sales, service and parts include:

- **Dealer systems**

HP can help integrate and improve commonality among dealer systems, creating an adaptive infrastructure that optimizes the vital links between the consumer, dealer and OEM. This adaptive infrastructure helps to reduce business technology cost, improve security, reliability and availability of the system for the dealer and the OEM. This infrastructure also facilitates the delivery of the latest service details and software to the service points.

- **Service parts operations integration**

Customer satisfaction and brand loyalty are very dependent on the effective management of aftermarket parts and services. HP business technology optimization capabilities can help to integrate and manage automotive OEM and suppliers' systems for aftermarket parts, and provide dependable solutions to link OEM and suppliers globally.

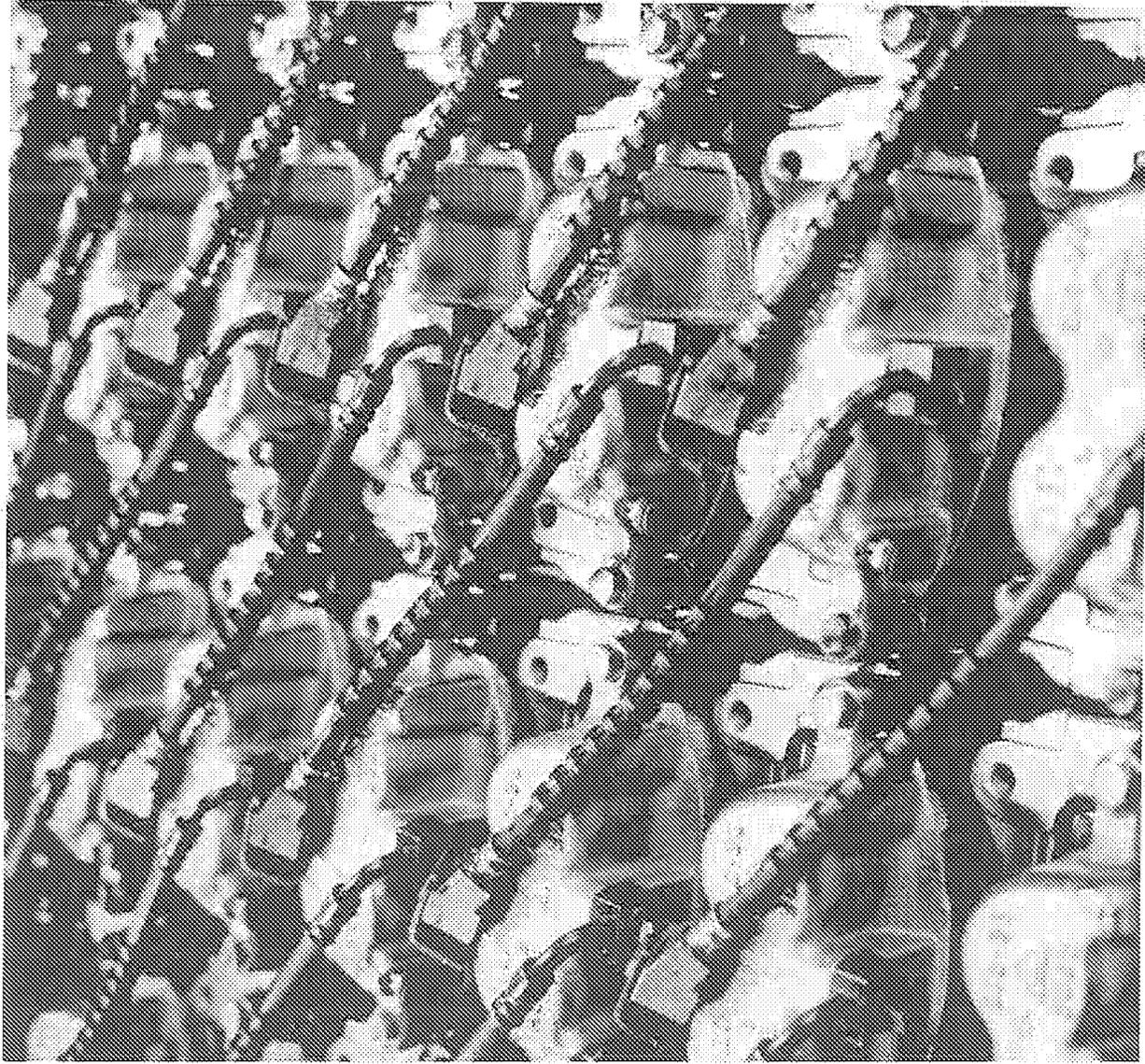
- **RFID capabilities**

As a world leader in RFID technology, HP offers RFID capabilities that can help improve efficiency and cut costs by tracking parts during assembly, work-in-process tracking of vehicles as they are built, and tracking the vehicle after assembly, with RFID (active, passive, ultra-wide band, Wi-Fi enabled), GPS and other relevant technologies.

- **Warranty management**

HP successfully manages the warranty demands of more than one billion customers in 170 countries, and HP has actually shown a notable decrease in warranty spending as a percentage of total costs over the past few years, due to the implementation of innovative warranty technologies and strategies.

The HP Warranty Solutions portfolio and warranty-related capabilities address the complete strategic, tactical and operational aspects of warranty management. HP utilizes both warranty functional modules and specialized warranty point solutions for such critical requirements as early warning, advance reporting, tracking and analytics.



Supply chain and business services

Increase revenue, reduce cost and mitigate risk by improving collaboration, visibility and control over automotive supply chains that are expanding into new geographies and encompassing new partners. HP supply chain capabilities and services address the entirety of supply chain operations, from initial assessment and benchmarking of current operations to efforts to increase transparency and accountability to outsourcing of business processes to allow manufacturers to manage business outcomes while focusing on their core competencies.

The HP supply chain portfolio includes:

- **Supply Chain Assessment Services**

HP supply chain consultants measure current process flows and metrics data against industry best practices for procurement, logistics and global trade, as well as against desired business outcomes. The assessment services can enhance return on investment while lowering both risks and costs of supply chain evolution.

- HP is a SAP Global Services Partner, and runs one of the largest SAP installations in the world.

- HP has been an annual winner of the SAP "Award of Excellence" since 1985, and was the first SAP partner to achieve 50,000 SAP application implementations.

- HP has been rated #1 in customer support, outsourcing and responsiveness for mission-critical SAP environments by Gartner.

- More than 50 percent of existing SAP small and medium business customers use HP systems.

- HP is a market leader in SAP R/3 outsourcing services.

- **Supply Chain Visibility**

Visibility—the ability to know what's going on across the extended supply chain and take immediate corrective action when and where needed—is a key to thriving in the global automotive marketplace. HP Supply Chain Visibility capabilities combine key performance metrics, business processes, and proven best practices based upon the Supply Chain Council's Supply Chain Operations Reference (SCOR), and HP integrated global supply chain experience. Visibility also allows long-term supply chain optimization that enables improved strategic and operational decision-making and responsiveness.

- **Enterprise Resource Planning—SAP**

HP is the leader in the SAP environment design, implementation and management, and HP also has significant experience and capabilities in implementing IS-Auto. HP solution and capability areas include application implementation and business technology infrastructure services, and encompass conventional SAP implementations, SAP Enterprise portals, and design and deployment of Advanced Planning and Scheduling (APS) solutions, along with other supply chain management and optimization solutions. This framework gives automotive manufacturing companies a roadmap for implementing ERP solutions that help streamline and integrate their businesses, improve collaboration and reduce risk.

HP capabilities for SAP include:

- SAP implementation

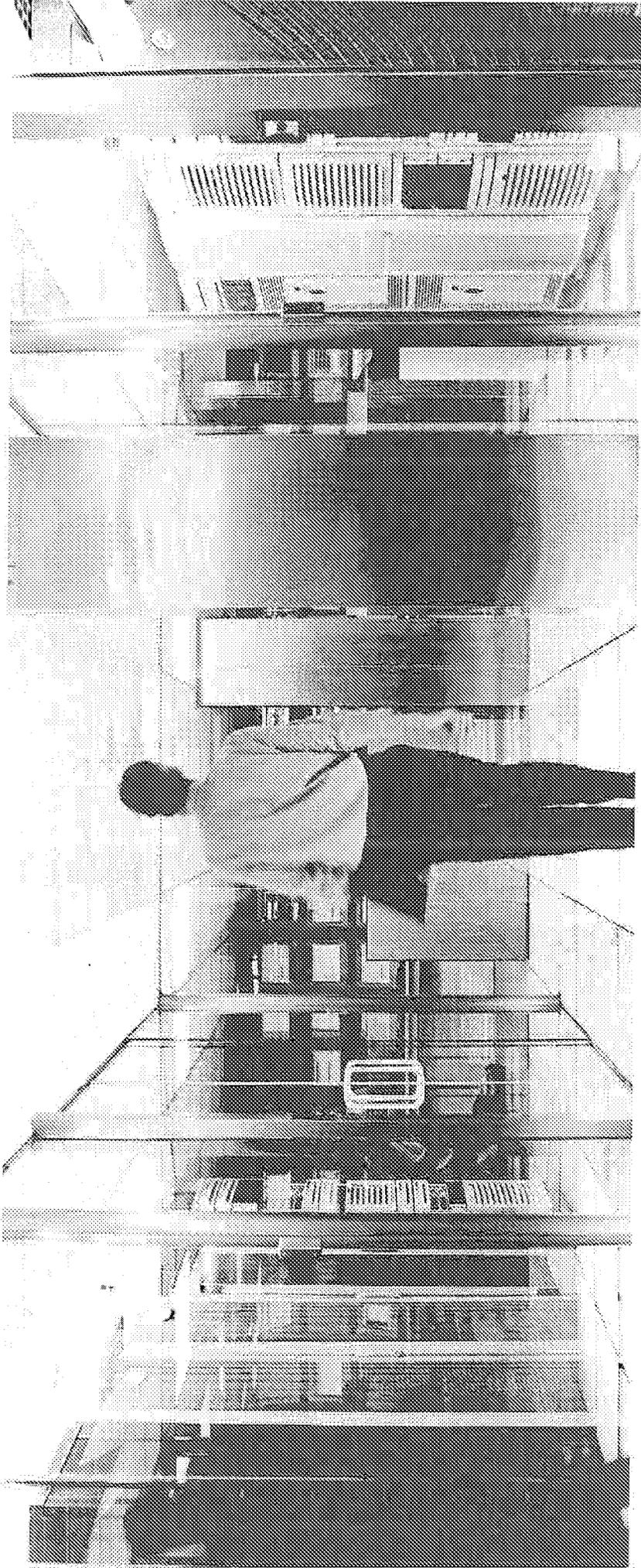
HP offers implementation, hosting and ongoing technical support for the mySAP Business Suite, from planning to deployment to management and operation of an efficient SAP R/3 system.

- SAP consolidation, upgrades and migration

Mergers, acquisitions and organic growth have resulted in decentralized, heterogeneous SAP landscapes, straining operational and maintenance budgets. HP helps automotive manufacturers consolidate, migrate, and upgrade their SAP environments, including providing support for key SAP NetWeaver capabilities.

- SAP Business Services Management (BSM)

Built on an enterprise service-oriented architecture (eSOA), HP BSM encompasses eSOA governance, quality and management, with elements for business process monitoring, governance and change management, test management and automation, synthetic transaction monitoring, and integrated incident management services. The solution is powered by the HP BSMconnect, Semi-Packaged Composite Application certified by SAP.



Enterprise infrastructure

HP strategy for designing and deploying business technology infrastructure is centered on helping companies streamline collaboration, spur innovation and improve execution. To achieve their desired business outcomes, automotive manufacturers must lower the costs of maintaining inefficient infrastructure, implement enhanced infrastructure monitoring, and establish repeatable, consistent business and security policies. HP offers leading-edge business technology backed with comprehensive lifecycle services, such as planning, consulting, design, analysis and implementation, all designed to improve return on existing assets and increase the benefit from all future technology investments.

Key HP services and solution areas for enterprise infrastructure include:

- **Business technology consolidation**

HP business technology consolidation capabilities target redundant and inefficient data bottlenecks and help eliminate infrastructure sprawl by consolidating data centers, networks and other infrastructure islands into fewer, centralized locations. Massively scalable HP solutions enable faster reaction to evolving market conditions and opportunities, and can significantly lower the costs of real estate and energy. Further, they can help deliver to HP customers and their ecosystem partners high levels of data availability, accuracy and security, with easier and less costly management.

• Infrastructure and application management

The pace of business has never been more frenzied; shorter design cycles demand improved flexibility, efficiency and availability from manufacturing applications and infrastructure. Modular, standards-based HP solutions and components offer a proven approach with robust management and control features for streamlined management and control throughout the lifecycle of composite applications and services. Integration with other HP Software products and third party tools is enabled for greater return on existing business technology assets. And HP also offers fully managed hosting services that can reduce the total cost of ownership (TCO), mitigate risk and increase the business value of application environments.

• Business continuity and availability

Automotive manufacturers depend on access to critical IT services and information. HP helps these customers prepare for a broad range of threats to the availability and stability of core infrastructure. These threats might include communications disruptions, problems with certain applications, scalability issues due to unexpected customer traffic volumes, and even natural or man-made disasters. Our holistic approach features a mix of proactive and reactive services, which is tailored to the specific requirements of each customer. Through this approach, HP can help control exposure and reduce vulnerability, harden mission-critical operations, and increase the speed of recovery should a major catastrophe strike.

The HP advantage for automotive manufacturing

HP has a long history of supplying innovative technology and thought leadership to the automotive industry, and that legacy continues to grow. The HP solutions portfolio for automotive draws upon a large number of field-proven best practices that help drive innovation and improve collaboration, controlling costs while enhancing visibility and security all along the supply chain. HP focuses decades of expertise and partnerships with leading technology innovators into a powerful integrated team to assist the world's top automotive manufacturing organizations to meet their customers' needs.

HP has:

- A track record of helping clients recover from more than 5,000 disasters
- One-stop shopping for solutions from planning to prevention to recovery
- Global reach, with more than 50 internationally located recovery facilities
- A collaborative approach that eases knowledge transfer
- Best practices-based methodology to analyze, build, integrate, manage, and evolve continuity solutions
- More experience with disaster-tolerant environments than any competitive vendor
- Flexible contract terms that address changing IT environments and business needs

HP delivers solutions, technologies and services arrayed across network infrastructure, network services, operations and business support, mobile solutions and end-user access. These solutions and services are based on open standards and feature planned upgrade roadmaps and technologies that support diverse operating environments and geographies. With expertise in developing, integrating, testing, installing and supporting the most complex deployments, HP provides a one-stop shopping approach that allows manufacturers to remain focused on business. And every HP solution is backed with the HP global delivery pipeline and locally available and experienced implementation and support teams that help reduce the risks and time frames for solution deployment and integration.

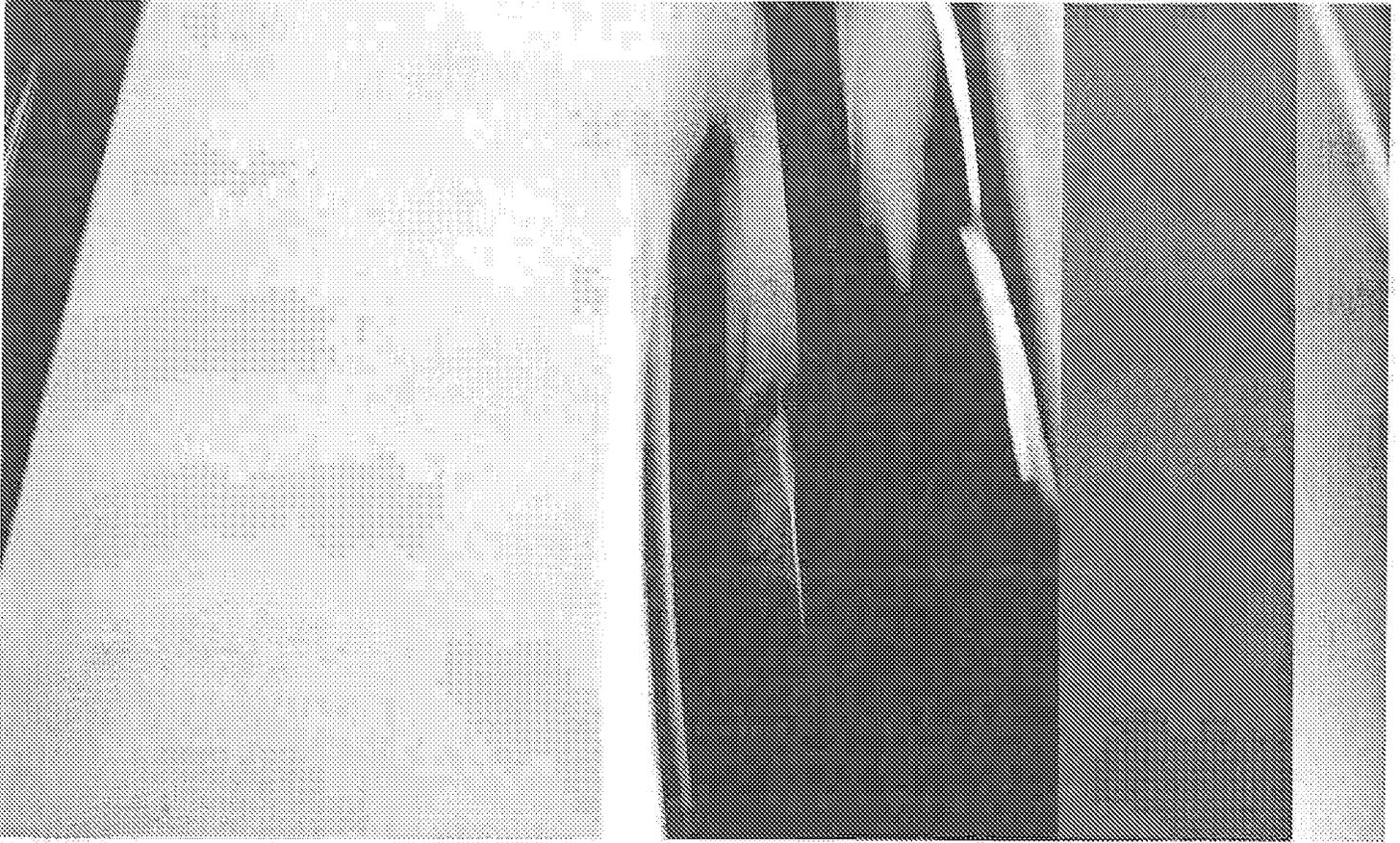
These innovative capabilities have made HP a major business technology supplier that is leading change in the automotive manufacturing industry. As the automotive industry continues to evolve, HP will be there to provide the solutions and services that keep it moving forward.

HP Services

Every HP solution leverages proven global experience that spans people, processes and technology. HP Services consultants understand the automotive industry, and can help companies get the most from their IT investments. HP Services can help in these critical areas:

- **Application Modernization Services**— These services offer a full range of maintenance, migration services, assessment and future business needs assessment, strategic and technological roadmaps for change, and monitoring services for the evolved application environments.
- **Mission Critical Support**— Crisis consulting and technical support is available at whatever level of service the organization desires, including Operational ITSM to help benchmark IT processes against others.
- **Outsourcing Services**— HP offers a comprehensive portfolio of innovative and scalable sourcing options so company resources can focus time and resources on their core business.
- **Security Services**— HP has developed a detailed methodology for secure evaluation of the manufacturing environment, risk assessment and both the data and the network are protected.
- **Financial Services**— HP Financial Services offers a range of creative and flexible financing options.

Across the globe, enterprise customers rely on HP Services to design, build, integrate and manage the IT systems that run their businesses. HP Services capabilities cover consulting and integration, outsourcing, support, and education services, all delivered by more than 69,000 services professionals in 120 countries. As the marketplace continues to evolve, HP Services will be there to help automotive OEMs and suppliers adopt and compete.



For more information: www.hp.com/go/automotive

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4AA1-4190EN1, July 2007



EXHIBIT J

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-K

(Mark
One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended: **October 31, 2008**

Or

- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number **1-4423**

HEWLETT-PACKARD COMPANY

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-1081436
(I.R.S. employer
identification no.)

3000 Hanover Street, Palo Alto, California
(Address of principal executive offices)

94304
(Zip code)

Registrant's telephone number, including area code: **(650) 857-1501**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock, par value \$0.01 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the registrant's common stock held by non-affiliates was \$114,540,461,000 based on the last sale price of common stock on April 30, 2008.

The number of shares of HP common stock outstanding as of November 30, 2008 was 2,416,201,335 shares.

DOCUMENTS INCORPORATED BY REFERENCE
DOCUMENT DESCRIPTION

10-K PART

Portions of the Registrant's notice of annual meeting of stockholders and proxy statement to be filed pursuant to Regulation 14A within 120 days after Registrant's fiscal year end of October 31, 2008 are incorporated by reference into Part III of this Report.

Sales, Marketing and Distribution

We manage our business and report our financial results based on the principal business segments described above. Our customers are organized by consumer and commercial customer groups, and distribution is organized by direct and channel. Within the channel, we have various types of partners that we utilize for various customer groups. The partners include:

- retailers that sell our products to the public through their own physical or Internet stores;
- resellers that sell our products and services, frequently with their own value-added products or services, to targeted customer groups;

Table of Contents

- distribution partners that supply our solutions to smaller resellers with which we do not have direct relationships;
- independent distributors that sell our products into geographies or customer segments in which we have little or no presence;
- original equipment manufacturers ("OEMs") that integrate our products with their own hardware or software and sell the integrated products;
- independent software vendors ("ISVs") that provide their clients with specialized software products, frequently driving sales of additional non-HP products and services, and often assist us in selling our products and services to clients purchasing their products; and
- systems integrators that provide various levels and kinds of expertise in designing and implementing custom IT solutions and often partner with HPS to extend their expertise or influence the sale of our products and services.

EXHIBIT K



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v1.5

Summary

Query: Mark Name contains all words: SMART TOUCH
and Proceeding Status is: ALL.

Number of results: 13

Proceeding Filing Date	Defendant(s) Property(ies)	Plaintiff(s) Property(ies)
91191565 08/19/2009	HID Global Corporation Mark: SMARTTOUCH S#:77244896 Mark: SMARTTOUCH XTREME S#:77244893	Nartron Corporation Mark: SMART TOUCH S#:74168921 R#:1681891
92050789 04/09/2009	Hewlett-Packard Development Company, L.P. Mark: TOUCHSMART S#:77197146 R#:3600880	Nartron Corporation Mark: SMART TOUCH S#:74168921 R#:1681891
91153519 11/06/2002	AMERICAN MEDICAL ALERT CORP. Mark: SMART TOUCH S#:76044477	NARTRON CORPORATION
91153939 10/28/2002	SIGMA GAME INC. Mark: SMART TOUCH S#:76322069	NARTRON CORPORATION
76322069 08/17/2002	Sigma Game Inc. Mark: SMART TOUCH S#:76322069	Nartron Corporation
76044477 08/15/2002	AMERICAN MEDICAL ALERT CORP. Mark: SMART TOUCH S#:76044477	Nartron Corporation
91124240 10/05/2001	NATIONAL RURAL ELECTRIC COOPERATIVE ASSO Mark: SMART TOUCH HOME S#:75861406	NARTON CORPORATION Mark: SMART TOUCH S#:74168921 R#:1681891
91150197 10/02/2001	VERIZON COMMUNICATIONS, INC. Mark: SMARTTOUCH S#:75878785	NARTRON CORPORATION Mark: SMART TOUCH S#:74168921 R#:1681891
75878785 08/13/2001	BELL ATLANTIC CORPORATION Mark: SMARTTOUCH S#:75878785	Nartron Corporation NARTRON CORPORATION Mark: SMART TOUCH
91122299 09/12/2000	NATIONAL RURAL ELECTRIC COOPERATIVE ASS Mark: SMART TOUCH HOME S#:75834666	NARTRON CORPORATION Mark: SMART TOUCH S#:74168921 R#:1681891
91117644 03/08/2000	BEVERLY J. SHUNICK & ASSOC. LLC Mark: SMART TOUCH S#:75488683	NARTRON CORPORATION Mark: SMART TOUCH S#:74168921 R#:1681891
91111972 10/05/1998	EMERSON ELECTRIC COMPANY Mark: SMART TOUCH S#:75289221	NARTON CORPORATION Mark: SMART TOUCH S#:74168921 R#:1681891