

EXHIBIT 27

IN THE UNITED STATES DISTRICT COURT FOR THE
WESTERN DISTRICT OF WISCONSIN

NOKIA CORPORATION,

Plaintiff,

v.

APPLE INC.,

Defendant.

Civil Action No. 10-CV-249

JURY TRIAL DEMANDED

APPLE INC.,

Counterclaim-Plaintiff,

v.

NOKIA CORPORATION and NOKIA INC.,

Counterclaim-Defendants.

DECLARATION OF WILLIAM C. SIMPSON

I, William C. Simpson, declare and state as follows:

1. I am an expert in the field of design and development of computer display systems. I hold a B.S. degree in Electrical Engineering from Lehigh University, in Bethlehem, Pennsylvania and an M.S. degree in Electrical Engineering from Rensselaer Polytechnic Institute, in Troy, New York. Additionally, I have 21 post-masters credits in Electrical Engineering from Lehigh University, where, from 1975 to 1977, I taught Electrical Engineering courses as an Instructor. I have developed and taught computer architecture courses at Intel, Unisys, and Texas Instruments. I have 38 years of experience in the design and development of computer systems, including computer display systems. I have been designing computer graphic display hardware and software

since 1984. I have extensive experience with computer graphic software standards including Graphical Kernel System (GKS), PHIGS (Programmer's Hierarchical Interactive Graphics System), the X Window system, OpenGL (Open Graphics Library), Computer Graphics Metafile (CGM), and raster graphics. I have designed PC hardware, including PC video computer display systems, since 1988. I designed computer graphic display hardware and software for Omnicomp Graphics Corp in 1984 and for Ferranti International Controls in 1985 through 1989. I designed computer graphic software for Magnavox in 1987 using the GKS computer graphic software standard. I designed computer graphic display hardware and software for Dupont Graphics Division in 1988. I designed PC computer graphic display hardware and software for Intel in 1987 through 1993. I designed PC hardware and software, including PC video display, Plug-and-Play for PCMCIA, PCI, and ISA, docking stations, and VESA DDC for Compaq (now HP) in 1995 through 1997.

2. I have been retained by Alston & Bird LLP, attorneys for Nokia Corporation and Nokia, Inc. ("Nokia"), to offer my opinions regarding Apple Inc.'s ("Apple") Patent No. 7,380,116 (the "'116 patent"). The matters set forth herein are of my own personal knowledge and if called as a witness I could competently testify thereto.

3. My experience and education are detailed in my resume, attached as Exhibit A.

4. In connection with my preparation of this declaration, I reviewed the '116 patent in its entirety and portions of its file history, and the patents and applications cited therein. I believe that I am an expert regarding the subject matter disclosed therein.

5. In my opinion, a person of ordinary skill in the art at the time would have had a B.S. degree in electrical engineering or computer systems engineering, and five years experience in the field of computer systems engineering, including computer display systems, or equivalent practical experience.

6. The '116 patent is directed to computer display systems, and specifically, changes in the configuration of the display environment. The term "modifying" is a general term and has no specialized meaning in the industry. The term "allocation" is a general term and has no specialized meaning in the industry. The phrase "modifying the allocation of display space," as used in Claim 1 of the '116 patent, was not a term of the art that was used by persons having ordinary skill in the art at the time the patent was filed, and does not have a specialized meaning in the industry.

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

Dated: December 16, 2010



William C. Simpson

EXHIBIT A

October 2010

RESUME of William C. Simpson

Interface Consultants, Inc.
3375 Westpark Drive #143
Houston, Texas 77005-4262
713 / 529-3706 Work
Internet Email Address: bill@ifc2.com
WWW home page URL: <http://www.ifc2.com>

CAPABILITIES: Software/Hardware design:

- Software: Device Drivers, Embedded firmware, BIOS, C, Assembly, Unix Internals, UNIX - Linux, RedHat, Centos, FreeBSD, OpenBSD, AIX, SGI, Sun, HP-UX.
- Applications: SCSI, Fibre Channel, Network, Embedded Systems.
- Hardware: Intel x86, ARM, and Motorola Microprocessors, FPGA, PALS, State Machines, TTL, CMOS, excellent debugging skills.
- Interfacing: PCI, I2C, SMB, USB, SPI, PCMCIA, ISA, serial and parallel ports, printers, plotters.
- Expert witness: interfacing, PCI bus, hot key, cache memory, paged memory, printers, plotters.

EDUCATION: B.S.E.E., M.S.E.E., plus 21 post-master's credits.

- June 1975 to May 1977 Post graduate studies in Electrical Engineering (ABD) (4.0 of 4.0, 21 credits) Lehigh University, Bethlehem, PA
- December 1974 M.S. Electrical Engineering (3.8 ave. of 4.0) Rensselaer Polytechnic Institute, Troy, NY
- June 1972 B.S. Electrical Engineering (3.6 ave. of 4.0) Lehigh University, Bethlehem, PA

EXPERIENCE: 38 years of software/hardware design and development.

Interface Consultants Inc., Houston, TX (9/85-present) - Contract consulting on the following projects:

(Note: some project timelines overlap):

- FBD Engineering (2006 - present)
 - Ported embedded C firmware from 68HC11 to Philips ARM processor.
 - Added SPI, I2C, USB, GSM modem interfacing.
 - Development with IAR IDE, EasyGUI multilanguage tool, JTAG Jlink debugger.
- (Startup Company – under NDA) (2008 – 2010)
 - Designed, developed, and debugged high speed WAN file copy engine based on UDT (UDP Based Data Transfer) and bbcp.
- Taeus (2007 – 2008)
 - Expert witness on printers and printer interface.
 - Expert report on invalidity.
 - Expert rebuttal report – non-infringement.
- Crossroads Systems (2006 - 2008).
 - Architect, design, and develop VTS Virtual Tape Server SCSI and FC appliance.
 - Added AES-256 encryption/decryption to virtual tape drive emulation. (2008)
 - RedHat Linux and FreeBSD daylight savings time rule update. (2007)
 - FibreChannel tape drive emulation debug. (2007)
 - Virtual tape emulation performance optimization. (2006)
 - AS/400 virtual tape drive emulation for IBM 3580. (2006)
 - NonStop virtual tape automated tape mounting – debug and fix multi-process queueing problem (2006)
 - Ported RedHat Virtual Tape System appliance code to Centos. (2006)
 - RedHat Qlogic Fibre Channel device driver update. (2006)
- Paul Hastings (2006)
 - Expert witness consulting on PC keyboard controller hot key implementation.
- TapeLabs (1999 - 2006) - acquired by Crossroads Systems in 2006.
 - Architect, design, and develop VTS Virtual Tape Server SCSI and FC appliance.
 - Developed embedded Linux SCSI target emulation of media changer (tape library) devices. (2006)

- Modified RedHat Linux SCSI target emulation to support autosense to support Fibre Channel. (2005)
- Developed ANSI tape labeling utility for ASCII and EBCDIC tape labels on RedHat Linux. (2005)
- Debugged RedHat Linux SCSI device driver shared memory pinning for DMA issue. This difficult problem required capturing SCSI bus traces on site with ANCOT Ultra2000 and writing debug code to obtain data visibility.
- Wrote utility to verify virtual tape data integrity by validating meta-data, headers, and compressed data.
- Wrote utility to dump tape format and data for virtual and physical tapes in C under RedHat Linux.
- Design and analysis for file system performance tuning under FreeBSD and RedHat Linux. (2005)
- Developed SCSI pass thru library using SG_IO ioctl under RedHat Linux. (2005)
- Developed embedded Linux SCSI target emulation and Fibre Channel target emulation for tape backup appliance under RedHat ES. (2004)
- Developed data compression feature for TapeLabs TapeServer virtual tape emulation appliance. (2004)
- Developed FreeBSD Fibre Channel target emulation for TapeLabs TapeServer embedded appliance. (2003)
- Developed virtual tape drive emulation for TapeLabs TapeServer embedded appliance. Emulated tape drive media using SAN disk files. Apache and PHP web based user interface development. (2003)
- Developed TapeLabs FreeBSD based SCSI tape and library management switch using Apache web server, PHP, Postgress, and C. SCSI target device driver development for Adaptec SCSI controllers. (1999 - 2003)
- Kasten Chase (2004 - 2005)
 - AIX device driver consulting for Corrent 720 PCI hardware cryptography board.
- AGSK (2003 - 2004)
 - Expert witness on the PCI bus. Detailed review and analysis of PCI bus arbitration, fast back-to-back bus cycles, and chipset HDL implementations.
 - Expert report - non-infringement.
 - Deposition on expert report - non-infringement.
 - Expert witness on PC architecture. Detailed review and analysis of ISA bus hot key IRQ implementations, cache memory, paged memory.
- Panasas (2002 - 2003)
 - Ported FreeBSD device drivers and kernel to new chip sets, revised Broadcom gigabit ethernet driver for Panasas NAS disk storage clusters.
 - Developed FreeBSD based factory diagnostics.
- Gagemaker (2002) Revisions to machine tool dimensional tolerance program in C.
- SDI System Development Inc. (1999 – 2000)
 - Austec IBM Channel to DR11W interface. Xerox/Versatec plotter SCSI device.
- Geoquest (1993 – 1999)
 - Wrote Sun Solaris SCSI printer target driver for high speed color and monochrome printers. (1999)
 - Wrote SGI O2 IRIX 6.3 device driver for PCI bus high speed interface. (1997)
 - SunOS and Solaris SCSI target drivers for thermal and color printers. (1993)
- AMI - American Megatrends Inc. (1997 - 1999)
 - Ported MegaRAID PCI SCSI RAID disk controller to Solaris 2.7 for X86 and Sparc. Added private ioctl interface. (1999)
 - Ported MegaRAID PCI SCSI RAID disk controller and Realmode boot driver to Solaris 2.6. (1998)
 - Wrote high performance OpenBSD and FreeBSD UNIX device driver MegaRAID PCI RAID disk controller. (1997)
- FBD Engineering (2001 - 2004)
 - Developed embedded firmware for 4 barrel frozen drink machine. (2004)
 - Developed embedded firmware in C to implement automatic beverage machine cleaning cycle, cell phone modem data reporting, special diet drink operation modes, and dial-up modem status reporting.
 - Developed Apache and PHP web based FreeBSD server for web based data reporting. (2001)
- Interface Consultants, Inc (1998 – 1999)
 - Set up and maintain Apache web servers, email servers, and DNS servers under FreeBSD. (1999)

- Wrote SGI IRIX 6.4 and 6.5 device driver for Ikon 10118 DR11W PCI interface board. (1998)
- BMC Software. (1998)
 - Unix kernel port of TCP/IP compression device driver to IBM AIX 4.3, HP-UX 11, and Solaris 2.6.
- Input/Output (1998)
 - Wrote IBM RS/6000 AIX 4.1/4.2 STREAMS device driver for ISA internal modem.
 - Wrote IBM RS/6000 AIX 4.2 device driver for Symbios/NCR PCI SCSI adapter - tape drive emulation.
- Alteon Networks (1997)
 - Wrote IBM RS/6000 AIX 4.2 network device driver for PCI Gigabit ethernet adapter.
- Gagemaker, Inc. (1997)
 - Designed high accuracy measuring system using Actel FPGA, optical encoder, quadrature decoding, and IR communication.
- HP Compaq (1995 – 1997)
 - PC BIOS modifications to add PCMCIA ATA flash disk boot and run of BSDI Unix for IP V6 Internet router for Compaq Network Products Division.
 - Notebook PC system keyboard controller 8051 BIOS code development to support battery I2C interface for Compaq. BIOS development to support Win95, changes to Plug-and-Play, PCMCIA, hibernation, suspend/standby, screen save, Advanced Power Management 1.0/1.1 (APM), docking. ISA Plug-and-Play (PnP) development under Win95.
- Interface Consultants, Inc (1993 – 1996)
 - Wrote IBM RS/6000 AIX 4.2 device driver for PCI bus high speed interface. (1996)
 - Wrote Linux and MSDOS SCSI target driver for NCR Symbios 53C8XX controller. Tape drive emulation. (1996)
 - Wrote IBM RS/6000 AIX 4.2 device driver for high speed printer/plotter. Support for smit and installp. (1995)
 - Embedded scanning/alarm system. Modbus RTU protocol. (1995)
 - Embedded real-time control firmware using 68HC11 microprocessor. (1994)
 - Ported IBM RS/6000 AIX 4.1.2 device driver for Ikon 10113 plotter interface and Ikon 10111. (1994)
 - Embedded real-time control firmware using 68HC11 microprocessor. PC Modbus master station and 68HC11 Modbus RTU data acquisition and control. (1993)
- SMI - Scientific Microsystems, Inc. (1995)
 - Design of sub-sea blow out protection control system using RadiSys and Force VME system running VRTX on Motorola 68332 CPU.
- MediTrol. (1995) Design and analysis of pharmacy pill dispensing machine.
- Daniel Industries (1993 - 1995)
 - Wrote embedded burn in test diagnostic firmware for 80186eb in Microsoft C. PC host control program in C using C-scape and Async Manager libraries. Communications using Modbus protocol and IIC. Also programmed 80C781 (8051 family) in C.
- Stagg Systems Inc. (1990 – 1994)
 - HDLC communications controller modifications. (1994)
 - Embedded 80186 firmware design for Conitel 2020 and Redac 70 RTU protocols under IBM RCM real-time executive. (1991)
 - Embedded 80186 firmware design for Conitel 2020 RTU protocols under IBM RCM real-time executive. (1991)
 - Design of RS/6000 AIX device driver to extend operating system kernel for RTIC communication coprocessor support (1990)
- Texas Microsystems, Inc. (1993) Solaris SBUS device driver development.
- Uson (1993)
 - Embedded PC firmware for hand held leak detector.
 - Industrial PC hardware and firmware design.
 - Custom motherboard BIOS extensions using Datalight C-thru ROM.
- Computervision (1990 - 1993)

- Taught 486 and PC architecture 5 day courses at Intel Chandler, AZ, Intel Folsom, CA, Intel Portland, OR, Texas Instruments Dallas, TX, and Unisys Salt Lake City, UT. Developed and presented 486SL course and logic analyzer lab.
- Zeh Graphic Systems (1989 - 1993)
 - Wrote IBM RS/6000 AIX 3.2.5 device driver for Ikon 10113 high speed plotter interface. Training video for device driver installation, trouble shooting and theory of operation.
 - Designed two PC/AT bus (ISA) boards to interface to HGS LaserDot plotter and Versatec interfaces. Work included circuit design, Actel FPGA design, PCB layout, and debug. Wrote BIOS extension for DMA support of printer interrupt 17h. (1991)
 - Wrote Unix software licensing package for Sun Sparc, DEC Alpha, IBM RS/6000, HP 720, SGI, Decstation, DG Aviiion, and Intergraph Clipper. (1990)
 - Enhancements to IBM RS/6000 AIX device driver for Versatec plotter interface board in C (and for PS/2 PC AIX). (1990)
 - Designed IBM RS/6000 AIX device driver for Versatec plotter interface board in C (and for PS/2 PC AIX). (1989)
 - Designed Versaplot RANDOM compatible library interface to Zeh plotting software. (1989)
 - Wrote Intergraph 'tutorial' for PC Microstation in Microsoft Fortran and C. (1989)
 - Designed HSRCOL compatible library interface to Zeh plotting software. (1989)
- Interface Consultants, Inc (1987 – 1991)
 - Wrote MS-DOS device driver for IKON 10111 high speed Centronics/Versatec plotter interface. TSR extends BIOS printer interrupt 17h to support double buffered DMA. (1991)
 - Programming in C for PC network plot spooler using TCP/IP. Included BIOS level programming and real-time DMA and interrupt handling. (1990)
 - Programming in C for PC network plot spooler using TCP/IP. Included BIOS level programming and real-time DMA and interrupt handling. (1989)
 - Wrote embedded 80188 RTU application in PL/M for Allen Bradley Modbus protocol. Wrote simple realtime exec to handle communications, A/D scanning, and digital input/output. (1987)
- Intel (1987 – 1993)
 - Ethernet device driver for IntelNetport print server. (1993)
 - Wrote Novell Netware device drivers for 82595 LAN chip in assembly language using MASM 5.1 and 6.0. (1992)
 - Design and debug of 486/33 EISA motherboard using Intel 82350DT chipset. (1991)
 - Design of Ethernet and Token Ring coprocessor using 386SL processor. (1990)
 - Hardware design of 386sx laptop PC motherboard. Software BIOS modifications. (1989)
 - 386 PC motherboard design and BIOS modification, 8042 PC/AT keyboard BIOS microcontroller programming, battery backed up RAM design. (1988)
 - Multibus II (MB II) 386 design for space station at Motorola. (1988)
 - Taught RMX286 course at Aerospace, Inc. (1988)
 - MB II 386 design for F16 at General Dynamics. (1987)
 - RMX286 & MB II configuration and debug at EG&G. (1987)
 - RMX286 & MB II configuration and debug. Remote boot over Ethernet at Watkins Johnson. (1987)
 - C, PLM86, and PLM286 programming for Flight Simulators at NASA Houston. Design with PAL's, RMX86, MB II and SCSI disk interface at Singer-Link. (1987)
- Dupont. Graphics Division (1988)
 - Programming in C (68010) for embedded VME bus seismic rasterizer using AMX realtime executive. Auscom 8400 IBM channel interface design.
- Logic Sciences, Inc. (1987)
 - Graphics programming in C, and Assembly on VAX and PC. Auscom 8900 IBM channel interface realtime programming on PDP11/73 (Q-bus) .
- Magnavox (1987)
 - Graphics drivers in C for Air Traffic Control radar displays. Evaluated 2K by 2K anti-aliased displays. GKS, CGI, DGIS, and controller interfacing.
- Gagemaker, Inc. (1987)
 - Embedded 8748 microcontroller real time assembly language programming.

- Design and programming in Borland C graphics mode for machine tool tolerance program.
- Designed DXF file translator to display Autocad drawings from C programs.
- Ferranti International Controls (1985 - 1989)
 - Analyzed font aliasing effect and wrote software simulator.
 - Designed font editor in Borland C.
 - Embedded 8031 and 80186 RTU programming.
 - High speed ECL digital design on VARS graphic controller .
 - Designed IBM Channel interface (FIPS60) software and hardware between mainframe and Multibus I.
 - Designed Multibus Expander to connect two Multibus card cages with bus masters on either side.
 - Programming in C, PL/M 86, PL/M 286, assembly, under RMX, and XENIX .

DIRECT EMPLOYMENT FOR THE FOLLOWING COMPANIES: (June 1972 to Sept 1985)

- Omnicomp Graphics Corp., Houston, TX (Aug 84-Sept 85) SENIOR DESIGN CONSULTANT - Graphics software/hardware for OMNI 1000 and 2000. DEC DRV11-W interface to VAX 11/780. 80188/8086 programs in C, PL/M, FORTRAN, and assembly for GKS. Multibus-II interface w/ PALS. Embedded 8086/8087/8089 programming for OMNI 1000 GKS graphics controller.
- HERCO, Houston, TX (July 84) CONSULTANT - Diagnostic programs for PDP11/34 under RSX11.
- Argonne Systems Inc, Houston, TX (April 84 - June 84) SENIOR ENGINEER - Designed Multibus II bus interface w/ PALs for DEC J11 CPU on Multibus II.
- Welex, Halliburton Logging Systems, Houston, TX (May 80 - Apr 84) SR.DEV ENGINEER - Designed well logging data acquisition hardware/software: STD and Multibus boards w/ 8085, 8086, 8748 embedded processors in realtime well logging application. PL/M, C programming. Used 7220 graphics and IEEE-488 bus.
- Houston Engineering Research Corp., Houston, TX (May 77 - May 80) SR. TECHNICAL STAFF - Embedded realtime SCADA system hardware/software using Varian V77, DEC PDP11/34, 6800, Z80/S100 bus, RSX11, FORTRAN, and Basic.
- Electrical Engineering Department, Lehigh University (June 75 - May 77) INSTRUCTOR- Taught EE courses on communications, digital and analog design. FORTRAN programming for Bethlehem Steel Research Lab. Post graduate studies toward PhD EE (ABD).
- Hamilton Standard, Windsor Locks, CT (June 72 - June 75) JUNIOR PROJECT ENGINEER - Digital design, FORTRAN and assembly language programming for data acquisition systems.

PERSONAL:

U.S. Citizen, non-veteran, married, no children, homeowner, excellent health.