

**From:** Alan Heimlich [Ya UJ`UXXFYggfYXUMWYX]

**Sent:** Thursday, February 20, 2014 4:55 PM

**To:** SoftwareRoundtable2013

**Subject:** RE: Request for Comments Regarding Prior Art Resources for Use in the Examination of Software-Related Patent Applications – Comments Due March 14, 2014

USPTO,

Below are my comments regarding Docket No.: PTO–P–2013–0064

Q(1) What specific databases, Web sites, tools and other resources do you find useful in searching for software-related inventions? Please indicate the strengths and limitations of each resource.

A(1) Since the USPTO has taken a stance that software per se is unpatentable this stakeholder would appreciate knowing what “software-related” means. The presented slides make a clear distinction (see slide 6 Dec 5, 2012 Alexandria Presentation) between “software” and “computer implemented inventions”. Given that the USPTO has taken the stance that software is not patentable, that leaves “computer implemented inventions”. Since “computer implemented inventions” require hardware they are in a patentable class. Therefore the focus of the examination should be on the hardware aspects of the “computer implemented invention”. First and foremost if hardware cannot be found to disclose the invention then it’s patentable. For example, if the “computer implement invention” is claimed as having a structure that sorts received social security numbers, the exam focus must be to find hardware or combinations of hardware that when put together in fact do receive social security numbers and sort them. Software or firmware or whatever might control the machine should not be considered because as noted this is not patentable material and it would be unfair for an examination to state that a general purpose computer can be programmed with software to do this. Not only can a computer be programmed to do most any operation, these are also all mental steps. The hardware must be considered a black box and internal details are not relevant. Therefore if an examiner finds hardware that will sort tickets, this cannot be used to show sorting of social security numbers as the hardware performs a different function. This is no different than two separate circuits that perform different operations with the electrons (physical entities) that flow through them. As to the references for hardware, most manufacturers of hardware have websites with a multitude of data sheets, application notes, and guides. I suggest that the USPTO gather the data sheets on the hardware from these sources. Here is a list of some top companies where you main obtain this information.

3dfx Interactive

3Dlabs

Acacia Research Corporation

Electron Tube Manufacturing, Semiconductor Manufacture, Electronic Connector Manufacturing More

Advanced Analogic Technologies, Inc.

Advanced Energy

Advanced Micro Devices

Advanced Photonix, Inc.

Aeluros Inc

Ageia

Alliance Fiber Optic Products

Alliance Semiconductor

Altera

AMIS Holdings, Inc.

Amkor Technology

ANADIGICS, Inc.

Analog Devices

Applied Micro Circuits Corporation  
Atheros  
Atmel  
Avago Technologies  
AVX Corporation  
Aware, Inc.  
Axiom Microdevices  
AXT Inc  
Broadcom  
C-Cube  
California Micro Devices Corporation  
Cambridge Display Technology  
Catalyst Semiconductor, Inc.  
CEVA Inc  
Cirrus Logic  
Comtech Group, Inc.  
Conexant  
CTS Corporation  
Cypress Semiconductor  
Cyrix  
Diodes Incorporated  
DSP Group, Inc.  
Enova Systems Inc.  
ESS Technology, Inc  
Exar Corporation  
Fairchild Semiconductor International, Inc.  
Formac Elektronik GmbH  
FormFactor  
Freescale Semiconductor  
Genesis Microchip  
Gennum Corp.  
GlobalFoundries  
GSI Technology, Inc.  
Hittite Microwave Corporation  
Holtek  
Horizon Semiconductors  
SK Hynix  
Ibis Technology Corporation  
Ikanos Communications  
IMEC  
Infineon Technologies  
Integrated Device Technology  
Integrated Silicon Solution, Inc.  
Intel Corporation  
International Rectifier  
Intersil  
IntriCon Corporation  
IPG Photonics  
Irvine Sensors Corporation  
IXYS Corporation  
Jazz Technologies, Inc  
Kemet Corporation  
KLA Tencor  
Lattice Semiconductor  
Leadis Technology  
LSI Corporation

Lumera Corporation  
Magnachip  
Marvell Technology Group  
MathStar, Inc.  
Maxim Integrated Products Inc.  
Melexis  
MEMC Electronic Materials, Inc.  
Metalink Ltd.  
Micrel  
Microchip Technology  
Micron Technology  
Microtune, Inc.  
Monolithic Power Systems  
MoSys  
MRV Communications  
National Semiconductor  
NeoMagic  
Netlist  
NetLogic Microsystems, Inc.  
Novellus Systems  
Numonyx  
Nvidia  
NXP Semiconductors  
OmniVision Technologies  
ON Semiconductor  
Opnext, Inc.  
Opti  
Optichron  
Photovoltech  
Photronics, Inc.  
Pixelworks  
PLX Technology  
PMC-Sierra  
Power Integrations  
Precision Monolithics  
Qimonda  
QLogic  
QuickLogic Corporation  
Ramtron International  
RF Micro Devices  
Samsung Electronics  
Semiconductor Manufacture, Telecommunications, Telephone and Telegraph Apparatus More  
Sanyo  
Sarnoff Corporation  
Sasken Communication Technologies  
SatCon Technology Corporation  
Semitool  
Semtech  
SigmaTel  
Silicon Image, Inc.  
Silicon Laboratories, Inc.  
SimpleTech  
Simtek Corporation  
Sirenza Microdevices, Inc.  
SiRF Technology Holdings, Inc.  
Skyworks Solutions

Sony Corporation  
Spansion  
Spatializer Audio Laboratories  
Spreadtrum Communications  
SRS Labs  
Staktek Holdings, Inc.  
Standard Microsystems Corporation  
sTec, Inc.  
STMicroelectronics  
Stratos International  
Stream Processors, Inc  
Super Talent Technology  
Supertex, Inc.  
Techwell, Inc.  
Tel-Instrument Electronics Corp.  
Tessera Technologies  
Texas Instruments  
Toshiba  
Transmeta  
TranSwitch Corporation  
TriQuint Semiconductor  
TSMC  
Ultra Clean Holdings, Inc.  
Universal Display Corporation  
UTAC Group  
Varian Semiconductor  
Video Display Corporation  
Vishay Intertechnology, Inc.  
Volterra Semiconductor Corporation  
Winbond  
Wolfson Microelectronics  
XenICs  
Xilinx  
Zilog  
Zoran Corporation  
Semiconductor Manufacture

Q (2) What are your concerns regarding the manner in which USPTO examiners formulate and implement search strategies to identify prior art for software related inventions? How should these concerns be addressed?

A(2) – As noted above the USPTO considers software per se as unpatentable and this stakeholder would appreciate Examiners stop searching for software but rather as explained above at A(1) the Examiners should be looking for hardware that from a black box level does what an invention claims.

Please confirm receipt.

Regards,

/Alan Heimlich/ Reg 49908