



## **Andrew Schulman**

aschulman@disputesoft.com 301.251.6313

Mr. Schulman joined DisputeSoft as a Managing Director, specializing in providing expert consulting services in regard to intellectual property disputes involving software. He has a particular focus on software patent litigation, pre-litigation investigations, and source code review. Mr. Schulman is also the founder and principal of Software Litigation Consulting. He is an attorney, software engineer, and software litigation consulting expert with a specialty in software patent litigation. Mr. Schulman also authors works on a variety of related subjects, including patent claim charting, software reverse engineering, software patent litigation, and source code review for litigation.

Since 1994, Mr. Schulman has assisted attorneys and their clients with technology aspects of litigation in more than 60 matters. Mr. Schulman works in a variety of litigation contexts involving software, firmware, and hardware, including pre-litigation investigations, infringement matters involving trade secrets, patents, and copyright, and matters involving internet privacy, identity validation, deceptive trade practices, antitrust, and digital rights management.

At DisputeSoft, and at Software Litigation Consulting, Mr. Schulman specializes in providing expert services (generally in a consulting capacity, though on occasion as a testifying expert) related to source code examination, software reverse engineering, pre-filing investigation of software and internet patent infringement, preparation of claim charts (infringement & invalidity contentions), and research in software prior art. The services he provides clients have included:

- Source code examination for patent, copyright, and trade secrets litigation (programming languages: C/C++, Java, JavaScript, Objective-C, C#, PHP, Flash ActionScript, Python, and other languages)
- Pre-filing investigation (in-depth infringement-related inspection of software/internet products services)
- Bulk spreadsheet analysis
- Non-infringement analysis
- Software reverse engineering, including static (e.g. disassembly) and dynamic (e.g. network packet sniffing) methods
- Mobile app software "teardown" for Android and iPhone (iOS)
- Locating software/internet prior art (for anticipation, on-sale, and public-use)
- Infringement, non-infringement, and invalidity & validity contentions (claim charts, including both PICs before source code is available, and post-discovery ICs with "pinpoint" source-code citations)
- Copyright and trade secret code comparisons, both literal and structural (non-literal), of both binary code and source code

A detailed list of Mr. Schulman's projects and clients is available on request under NDA.

## **PUBLICATIONS**

Mr. Schulman is currently preparing two books for publication, one on computer source code review for litigation and one on patent claim charts. Earlier, he co-wrote and edited books on the internal operation of Microsoft operating system, including Undocumented DOS and Undocumented Windows. A representative list of articles he has published include:

- Source code examination for litigation: A few basics and FAQs
- Computer software source code and e-discovery
- Source code protective orders (POs), from a source code examiner's perspective
- Reverse engineering as a fact-investigation tool in software patent litigation
- Hiding in plain sight: Using reverse engineering to uncover (or help show absence of) software patent infringement
- Claim charts for patent litigation: A brief introduction
- Common problems in claim charts for patent litigation
- Why claim charts?: Underlying purposes and policies for Local Patent Rule requirements

## **EDUCATION**

L.L.M., Intellectual Property, Golden Gate University School of Law J.D., Law, Northwestern California University School of Law Undergraduate Studies, University of California Berkeley