

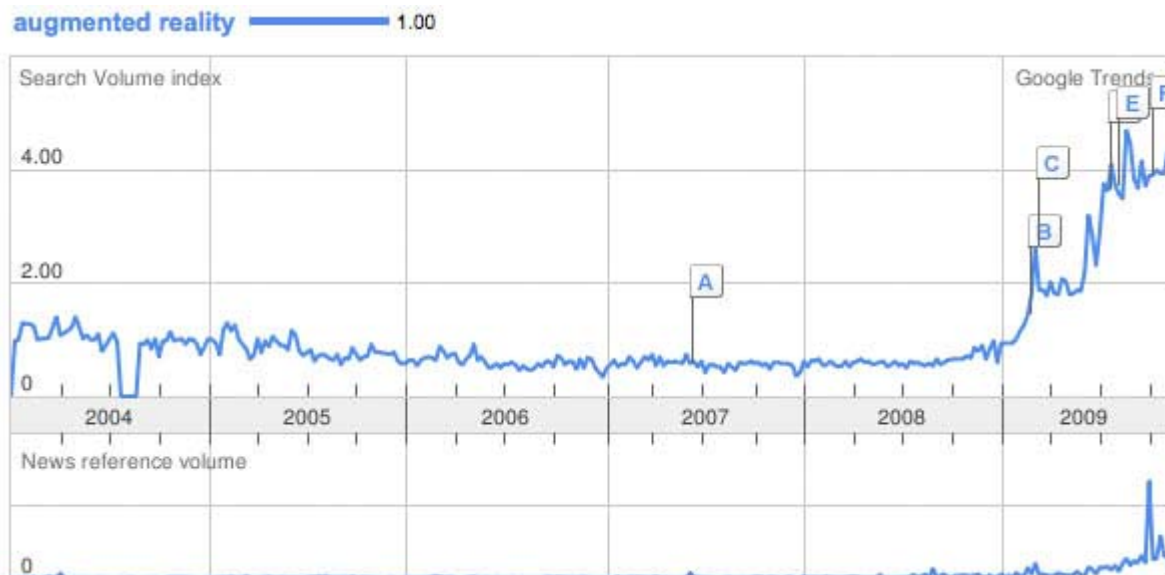


Legal Issues with Augmented Reality

Augmented Reality (AR) refers to a display of a *real-world* environment whose elements are *augmented* by (e.g., overlaid with) one or more layers of text, data, symbols, images or other graphical display elements. The range of applications that can take advantage of this technology is immense.

Augmented Reality, as a concept has existed for decades. But, as indicated below, the time for the commercialization of AR has finally arrived:

- In May 2008, Gartner Group identified AR as one of the top 10 disruptive technologies for 2008-2012 and predicted it to be used by 30% of the mobile workforce by 2014.
- An April, 2010 article in *Business Week* states: “Augmented Reality is near the beginning of a meteoric rise and it has the potential to affect every aspect of how we interact with technology.”
- *Time Magazine* listed AR among the Top 10 tech trends for 2010
- Google Trends shows that since 2009, the search terms surrounding AR have grown substantially



Google Trends for Augmented Reality

As with any “new” technology, or at least the commercialization of such a technology, there are both incredible business opportunities and potential legal risks. The following is an overview of some of the legal issues that relate to AR.



In an emerging field like AR, it is important to develop a comprehensive intellectual property (IP) strategy to maximize the protection of your IP, and minimize liability for infringement of third party IP. Some of the considerations relevant to these issues in AR systems are discussed below.

AR systems and services can embody a variety of forms of IP, including:

- Copyrights – despite common misconceptions, various aspects of AR can be copyrighted, including for example certain aspects of:
 - Maps - many people believe that maps are not subject to copyright, but this is not necessarily true. Courts have found various aspects of maps to be copyrightable (See, e.g., *Mason v. Montgomery Data, Inc.*)
 - Databases and compilations of data (e.g., selection, arrangement and presentation of data)
 - User interface features of AR applications
 - Overall look and feel/individual display elements
 - single screen
 - flow/sequence
 - overall experience
 - mash-ups/compilations
 - Photos
 - Underlying code
 - User generated comments, ratings, and/or other content
- Trademarks – names or logos used in providing the AR system may be protectable by trademark registration. This may include the use of a particular domain name (i.e., www.ARsystemname.com).
- Patents – can protect systems, processes, business methods, data processing and display and various user interface features and functionality. In the context of AR, some examples of the categories of things that may be patentable include:

Examples of Patentable Subject Matter

<p><i>Systems</i> – overall system architecture and functionality; e.g., integration of location awareness/real-time data sensors with AR application; contextual awareness, etc.</p>	<p><i>Features/Functions/Processes</i> –</p> <ul style="list-style-type: none"> • unique combinations of features/functions/information • GUI features and functionality • algorithms or implementations of algorithms • user customizability • integration of the functionality of existing technologies and/or services 	<p><i>Data</i> - capture, management, manipulation, analysis, modeling and display; data aggregation and display; data structures</p>
<p><i>Maps</i> - map generation, map display, indexing, markers, attributes, tagging, data layering and other map functionality</p>	<p><i>Business Methods/Services</i> – location based services; commerce and other interactions via AR application; location-based advertising models; real-time promotions</p>	<p>Miscellaneous</p> <ul style="list-style-type: none"> • Object Tagging and Tracking • Integration of social networking features in AR environment

- Contracts/Licenses – an important component of an overall IP protection strategy is to effectively use contractual obligations to supplement other forms of IP protection, including:
 - Terms of Service - it is important to develop a customized Terms of Service based on a variety of factors unique to the AR application that you are providing - an effective Terms of Service can protect your business, third party partners, content and data providers, users, and third party application providers leveraging your AR platform/service
 - Data Licenses and Terms of Use – contractually protect against misuse and misappropriation of your data
- Technological Measures – consider use of technological measures to enhance other IP protection, including:
 - DRM
 - Watermarking
 - Copyright Traps – purposeful errors or other tactics to facilitate the ability to prove copying
 - Technological tools to limit access - leverage provisions of the DMCA that make it unlawful to circumvent technological measures to prevent unauthorized access to copyrighted works

Liability Avoidance

- Data Issues
 - ensure appropriate access to various data sources that are used in AR applications and that the usage is consistent with any licenses or terms of use for the data
 - consider reliability of data used to avoid liability for inaccurate, incomplete or misleading information and use appropriate disclaimers for third party data
- Trademarks - In addition to traditional trademark issues, particular care is needed with respect to trademarks, including logos that are used in AR views and improper attempts to capitalize on those trademarks, by, for example, product placement or advertising.
- Privacy - in addition to traditional privacy issues, consider special issues with respect to personal location tracking information and use of such information;
 - if you are going to receive any personal location tracking information, or information about the AR features accessed by a user (the AR equivalent of clicks from a website), then you will need to develop a privacy statement that explains to users what you plan to do with information you collect from them
 - properly configured, AR will enable you to implement what is considered to be best practice in privacy management – the concept of real time notice and consent. An AR environment that will collect and share information could be configured in numerous ways. For example, if a user has subscribed to a geo-location sharing application/service, the user could select options for informing other members of their location: notify all automatically (default open), notify only friends, notify specific individuals, request permission to notify when a registered individual comes within a certain range, do not notify (default closed). Similarly, on the marketing front, offers/adds could provide real time privacy notice and selections for users.
- Copyrights – make sure you own your code by having a written agreement with any third party developers, including graphic designers.
- DMCA Policy – if your AR application enables or allows posting of user generated content, you can minimize liability for copyright infringement by developing and implementing a proper DMCA policy
- COPPA – need to develop appropriate policy if likely to attract children under 13 years of age (assuming the applications will collect any personal information). One way to avoid the onerous COPPA obligations is to avoid collecting personally identifiable information about users if you believe users under 13 will be participating in a generally available service (i.e., one not targeted towards or intended to attract users under 13)



Our Involvement in the Industry

Pillsbury's Virtual Worlds and Video Games Team is actively involved in many facets of virtual worlds, video games, augmented reality, mirror worlds and related technologies. We regularly participate in leading virtual world and video game conferences and industry events and are proud to sponsor the ARE 2010 augmented reality conference.

About Pillsbury's Virtual Worlds & Video Games Team

Pillsbury's Virtual Worlds & Video Games Team includes attorneys who are at the forefront of issues central to the virtual worlds and video games industries. We are a multidisciplinary legal team that understands the business and technology issues involved with virtual worlds, video games augmented reality, mirror worlds and related technologies, assisting clients across the entire spectrum of legal matters and business opportunities. Across our 14 offices in the U.S., Europe and Asia, we represent some of the largest companies in these industries and some of the most promising startups and emerging growth companies.

- Intellectual property: patent, trademark, copyright protection and enforcement in virtual spaces, mirror worlds and augmented reality applications
- Open source software and content issues
- Agreements and licensing, including drafting and enforcing terms of service agreements for virtual spaces, mirror worlds and augmented reality applications
- Virtual items and currency—strategies for protecting; tactics for enforcing your rights and guidance to minimize liability
- Corporate law: formation, financing, policies and procedures
- Employment law and employee virtual world usage policies
- Privacy and data protection, including Children's Online Privacy Protection Act (COPPA) compliance
- Litigation and alternative dispute resolution
- Financial services: virtual currency, exchange and regulatory issues
- Tax advice for virtual worlds activity
- Regulation: law enforcement surveillance, gambling law, FCC and DOJ issues

Contact Information

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For more information about our Virtual Worlds & Video Games Team, or to sign up for virtual worlds legal alerts, events and notices, please visit www.pillsburylaw.com/virtualworlds