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.

Although Augmented Reality, as a concept has existed for decades, the time for the commercialization of AR has finally arrived. As with any “new” technology, or at least the commercialization of such a technology, there are both incredible business opportunities and substantial legal risks that come with Augmented Reality.

In an emerging field like AR, it is important to understand the unique legal issues and develop a comprehensive legal strategy, consistent with your business model, to maximize protection of your intellectual property, minimize liability for infringement of third party Intellectual Property (IP), address contractual (e.g., terms of service) and regulatory issues.

**Augmented Reality Systems**
AR systems and services can embody a variety of forms of IP.

**Copyrights**
Copyrights—despite common misconceptions, various aspects of AR can be copyrighted, including 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 (*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 such as single screen, flow/sequence, overall experience and mash-ups/compilations.
- Photos
- Underlying code

**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**
Patents can protect systems, processes, business methods, data processing and display and various user interface features and functionality.
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 (TOS)—it is important to develop a customized TOS based on a variety of factors unique to the AR application that you are providing. An effective TOS 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:

- Data Rights Management (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 Digital Millennium Copyright Act (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

Examples of Patentable Subject Matter
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.

Examples of Patentable Subject Matter
Business Methods/Services
Location-based services; commerce and other interactions via AR application; location-based advertising models; real-time promotions.

Data
Capture, management, manipulation, analysis, modeling and display; data aggregation and display; data structures.

Maps
Map generation, map display, indexing, markers, attributes, tagging, data layering and other map functionality.

Miscellaneous
Object tagging and tracking; integration of social networking features in AR environment.

Systems
Overall system architecture and functionality; e.g., integration of location awareness/real-time data sensors with AR application; contextual awareness, etc.

Features/Functions/Processes
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.
Copyrights
Make sure you own your code by having a written agreement with any third party developers, including graphic designers. Many companies do not understand that not all work qualifies as a “work for hire” (including certain software) and thus do not own what they think they own.

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.

Children’s Online Privacy Protection Act (COPPA)
You will need to develop appropriate policy if you are 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).

About Pillsbury’s Internet Teams
Pillsbury’s multidisciplinary Internet teams include nearly 30 attorneys around the world working at the forefront of emerging business and legal issues relating to virtual and mirror worlds, augmented reality, virtual goods and currency, and other social media concerns. The teams assist clients with venture capital and private equity funding, mergers and acquisitions, legal and business strategies for virtual goods and currency, IP strategies, implementation and enforcement, and preparation of key agreements and policies. (These include TOS, DMCA and COPPA policies; compliance and enforcement policies; data protection and privacy policies; and much more.) We represent both the largest players in the industry and some of the most promising emerging companies.

Additional information about the Internet teams can be found at pillsburylaw.com/internet-and-interactive-entertainment and pillsburylaw.com/internet-and-social-media, or visit our blog at socialgameslaw.com.

About Pillsbury
Pillsbury Winthrop Shaw Pittman LLP is an international law firm with offices around the world, and a particular focus on the technology, energy & natural resources, financial services, real estate & construction, and travel & hospitality sectors. Recognized by legal research firm BTI as one of the top 20 firms for client service, Pillsbury and its lawyers are highly regarded for their forward-thinking approach, their enthusiasm for collaborating across disciplines and their unsurpassed commercial awareness.