The "Internet of Things" (IoT) is a network of devices – things – of all types.
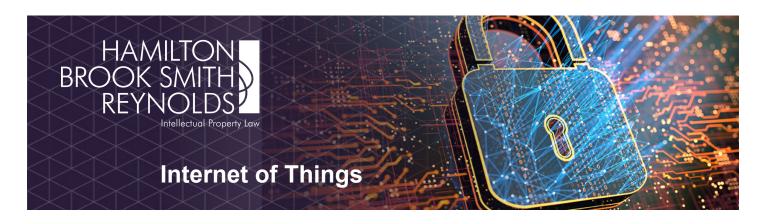
These devices include electronic sensors and network connectivity that enable the sensing, collection, and exchange of data. Generally, the term IoT refers to distributed systems that gather information, use that information to make control decisions, and apply the control decisions, all through communications conveyed across a network infrastructure (e.g., the Internet). A related term, "Machine to Machine" (M2M), refers to communication between devices of the same or similar types. M2M is commonly understood to be a subset of IoT.

Well-known examples of IoT technology include Internet-connected household appliances that can be monitored and/or controlled through smartphone applications, wearable fitness monitoring devices, and self-piloting automobiles.

Each "Thing" of "Internet of Things" typically contains local electronics such as computer hardware, network interface components, and sensors, along with associated software and/or firmware. IoT is thus a unique combination of multiple technical fields, such as computer hardware, computer software, network infrastructure, mobile devices, medical devices and telecommunications. Here at Hamilton Brook Smith Reynolds, our attorneys leverage their expertise in these fields to help clients develop intellectual property protection strategies in this rapidly growing and evolving technology.

Our attorneys have the backgrounds and experience necessary to assist clients with protecting innovations that fall within a wide variety of IoT technology fields, such as:

- Medical devices/healthcare systems
- Health and fitness
- Monitoring /control of private homes and commercial facilities
- Transportation (e.g., self-piloting cars, drone-based shipping, commercial transport)
- Information security/privacy
- Public safety
- Highway infrastructure
- Energy infrastructure
- Weather monitoring/forecasting
- Manufacturing monitoring/control
- Retail monitoring/control/sales
- Telecommunications monitoring/control

In the IoT field, we have handled work in the health and fitness industries pertaining to a wearable device medication reminder system, as well as software for a pedometer that sends the information to health insurance agencies that use the data to provide discounts to customers. We have also aided clients with IoT-related inventions for geo-location purposes, where sponsors can use the location of a mobile phone to allow a consumer to pay for items without having to use a physical credit card. In the aviation industry, we have worked on issues involving software and computer-based systems that aid small aircraft pilots by providing several pieces of time-sensitive data, calculated results, and imagery for manipulation.