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**WM-1005: SESSIONMAGNIFIER: A SIMPLE APPROACH TO
SECURE AND CONVENIENT KIOSK BROWSING**

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Application: Secure public web browsing. Our invention utilizes a mobile device to achieve secure web browsing at a public computing kiosk, such as in a hotel, library, or café.

Summary: We have developed a method and security system architecture for secure internet browsing on public computers. Despite the proliferation of internet-capable mobile devices in recent years, public computers are still attractive platforms for tasks that require a larger display and a full keyboard. Unfortunately, many of these tasks involve entering sensitive information such as passwords and account numbers. Entering such information on a public computer is potentially dangerous, as public computers are far more likely to contain hidden spyware and adware than a user's mobile device.

SessionMagnifier seeks to combine the usability advantages of a public computer and the security advantages of a mobile device. The invention involves a security system architecture residing on the user's mobile device, which initiates an internet communication session with a public computer via a local area network (LAN). The architecture running on the mobile device allows it to serve as a browser extension between the internet and the public computer, preventing the public computer from tampering with or changing any sensitive information entered on computer, and barring the unwanted transfer of sensitive information to the public computer. The three primary functions carried out by the invention are communication control, request processing, and response generation. The architecture synchronizes the content on the public computer's web browser with the mobile browser and, more importantly, ensures secure browsing by requiring separate user verification on the mobile device any time that the public browser requires user-supplied inputs, like passwords and account information.

SessionMagnifier draws on the security advantages of mobile devices to overcome the security drawbacks of web browsing on a public computer, allowing anyone with a trusted mobile device to achieve secure public browsing even for tasks that require the input of sensitive information. Further, because the architecture enabling this secure browsing runs on the mobile device, this method is user-controlled and does not require modification of the public computer. This system thus provides a light, elegant, and user-friendly method to achieve secure web browsing on a public computer.

Intellectual Property: Issued U.S. Patent No. 8,381,269

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