UNITED STATES SECURITIES AND EXCHANGE COMMISSION December 4, 2009

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES EXCHANGE ACT OF 1934

Ambient Corporation

File No. 000-23723 - CF#24420

Ambient Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on November 16, 2009.

Based on representations by Ambient Corporation that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit(s) will not be released to the public for the time period(s) specified:

Exhibit 10.1 through December 31, 2015

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Kathleen Krebs Special Counsel