



15 October 2013

Companies Announcement Office
ASX Limited
Exchange Centre
Level 4, 20 Bridge Street
Sydney, NSW 2000

**Cortical Dynamics Ltd –
Two New Patents Granted for BAR Monitoring System**

Please find attached an operational update from BPH Energy Ltd (**ASX: BPH**) investee company Cortical Dynamics Ltd.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "D Ambrosini".

Deborah Ambrosini
Director and Company Secretary



15 October 2013

BPH Energy Limited
14 View Street
North Perth, WA 6006

Two New Patents Granted for BAR Monitoring System

Cortical Dynamics ("Cortical") is pleased to provide the following update of its patent portfolio.

The patent entitled, 'EEG analysis system' has been granted by the US Patent and Trademark office. This patent has already been granted in Australia, China, Japan and New Zealand. It is Cortical's third granted patent within the US.

The US is the world's largest market for depth of anaesthesia monitoring, with an estimated 21 million people administered general anaesthesia for surgical procedures annually. The new patent provides an exclusivity period until July 2030.

Furthermore, Cortical is also pleased to inform BPH that the Australian patent entitled, 'Neurodiagnostic monitoring and display system' has been granted by the Australian patent office. The granted Australian Patent has an expiry date of November 2027.

Cortical's Chairman, Mr David Breeze commented, "The granting of these two patents is another major step in protecting Cortical's innovations in depth of anaesthesia monitoring. Our unique physiological approach to depth of anaesthesia monitoring has proven competitive advantages over other existing technologies and it has been recognized as being both novel and protectable."

Cortical has developed an extensive patent portfolio encapsulating the BAR monitoring system and its physiologically based algorithms, with patents granted throughout Australia, New Zealand, the United States, Japan and the People's Republic of China.

About the BAR Monitor

The Brain Anaesthesia Response (BAR) monitoring system measures a patient's brain electrical activity, the electroencephalogram (EEG), in order to indicate how deeply anaesthetised a patient is during an operation via an adhesive sensor applied to the forehead. The BAR monitor is designed to assist anaesthetists and intensive care staff in ensuring patients do not wake unexpectedly, as well as reducing the incidence of side effects associated with the anaesthetic.

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The BAR monitor improves on currently used EEG monitors by utilising advances in understanding of how the brain's electrical activity is produced, and how it is affected by anaesthetic and sedative drugs. The BAR's unique physiological approach is aimed at independently monitoring the hypnotic and analgesic states associated with anaesthesia, a feature no known existing EEG based depth-of-anaesthesia monitor is able to achieve. Objectively monitoring of hypnotic and analgesic state may lead to improved anaesthetic and surgical outcomes, by reducing recovery times and minimising drug costs.

In 2012 Cortical completed its first human clinical trial using the BAR monitoring system which was conducted at St Vincent's Hospital, Melbourne. The trial was a significant event in the BAR monitors' development program as it is the first time the complete BAR monitoring system has been employed within the operating theatre.

About Cortical Dynamics

Cortical Dynamics Ltd is a medical technology company that was established in 2004 to commercialise intellectual property relating to brain function monitoring developed by Professor David Liley and his scientific team at Melbourne's Swinburne University of Technology.

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