(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
17 July 2003 (17.07.2003)

PCT

(10) International Publication Number
WO 03/057918 A1

(51) International Patent Classification[7]: C12Q 1/68

(21) International Application Number: PCT/US02/32073

(22) International Filing Date: 5 October 2002 (05.10.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/017,007 14 December 2001 (14.12.2001) US

(71) Applicant *(for all designated States except US)*: **ZILA, INC** [US/US]; 5227 North Seventh Street, Phoenix, AZ 85014-2800 (US).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **BURKETT, Douglas, D** [US/US]; 942 South Coral Key Court, Gilbert, AZ 85233 (US).

(74) Agent: **DRUMMOND, William, H.**; Drummond & Duckworth, Suite 440, East Tower, 5000 Birch Street, Newport Beach CA 92660 (US).

(81) Designated States *(national)*: AU, BR, CA, CN, IL, IN, JP, MX, NO, SG, US.

(84) Designated States *(regional)*: European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR).

**Published:**
— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

WO 03/057918 A1

(54) Title: LIGHT-DIRECTED MOLECULAR ANALYSIS FOR CANCER PROGNOSIS AND DIAGNOSIS

(57) Abstract: The location at which tissue samples are obtained to determine whether cells exhibit characeristics associated with cell differentiation or cancer by molecular analysis is determined by illuminating a gross anotomic area of tissue with a light that 5 selectively distinguishes cancerous and precancerous tissue from normal tissue.