As filed with the Securities and Exchange Commission on August 1, 2014

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CRAILAR TECHNOLOGIES INC.
(Exact name of registrant as specified in its charter)

British Columbia	5600	98-0359306
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

Suite 305, 4420 Chatterton Way, Victoria, British Columbia, Canada, V8X 5J2
Telephone: (250) 658-8582
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Theodore R. Sanders
Chief Financial Officer
629 McVey Avenue
Lake Oswego, Oregon, U.S.A., 97034
Telephone: (503) 387-3941
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Thomas J. Deutsch
McMillan LLP
Royal Centre, 1055 West Georgia Street, Suite 1500
Vancouver, British Columbia, Canada, V6E 4N7
Telephone: (604) 689-9111

Ellen S. Bancroft
Morgan, Lewis & Bockius LLP
5 Park Plaza, Suite 1750
Irvine, California, U.S.A., 92614-3508
Telephone: (949) 399-7000

As soon as practicable after the effective date of this registration statement.
(Approximate date of commencement of proposed sale to the public)

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box: [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [X] Registration No. 333-195508

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registrations statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

[ ] Large accelerated filer
[ ] Accelerated filer

[ ] Non-accelerated filer
(Do not check if a smaller reporting company)
[X] Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Units, each consisting of one share of common stock, without par value, and one warrant to purchase common stock, without par value (1)(3)	$ – (4)	$ – (4)
Common stock, without par value, included in units (1)(3)	–	– (2)
Warrants included in the units (1)(3)	–	– (2)
Common stock, without par value, underlying the warrants included in the units (1)(3)	523,250	67.39
Total	$ 523,250	$ 67.39(5)

(1) Includes units that the underwriters have the option to purchase to cover over-allotments, if any.

(2) No separate fee required pursuant to Rule 457(g) under the Securities Act.

(3) Pursuant to Rule 416 under the Securities Act, there are also being registered such additional securities as may be issued to prevent dilution resulting from share splits, share dividends or similar transactions.

(4) The units were previously registered under registration statement on Form S-1 (File No. 333-195508).

(5) In accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended, an additional amount of securities having a proposed maximum aggregate offering price of no more than 20% of the maximum aggregate offering price of the securities eligible to be sold under the related registration statement on Form S-1 (File No. 333-195508), as amended (the “Prior Registration Statement”), is hereby registered. The registrant previously registered securities with a proposed aggregate offering price of $14,950,000 on the Prior Registration Statement. A total of $2,408.82 in filing fees was previously paid.

This registration statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) of the Securities Act of 1933, as amended.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This Registration Statement is being filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) under the Securities Act of 1933, as amended. This Registration Statement relates to the public offering of securities of the Registrant contemplated by the Registration Statement on Form S-1, as amended (File No. 333-195508), originally filed by the Registrant on April 25, 2014, as amended (the "Prior Registration Statement"), and which the Commission declared effective on July 31, 2014.

This Registration Statement is being filed for the sole purpose of registering for issuance and sale an increase of $523,250 of the maximum aggregate offering price of our common stock underlying warrants included in the units registered under the Prior Registration Statement. The additional securities that are being registered for issuance and sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Prior Registration Statement. The information set forth in the Prior Registration Statement and all exhibits thereto are hereby incorporated by reference in this filing.

The required opinions and consents are listed on the exhibit index and filed with this filing.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Victoria, British Columbia, Canada, on August 1, 2014.

CRAILAR TECHNOLOGIES INC.

By: *<u>/s/ Kenneth C. Barker</u>*
Kenneth C. Barker, Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement was signed by the following persons in the capacities and on the dates indicated:

Signature	**Title**	**Date**
/s/ Kenneth C. Barker Kenneth C. Barker	Chief Executive Officer and a Director (principal executive officer)	August 1, 2014
* Jason Finnis	President, Chief Innovation Officer and a Director	August 1, 2014
* Theodore Sanders	Chief Financial Officer and Treasurer (principal financial officer and authorized representative in the United States)	August 1, 2014
* Guy Prevost	Corporate Controller and Compliance Officer (principal accounting officer)	August 1, 2014
* Robert Edmunds	Director	August 1, 2014
* Jeremy Jones	Director	August 1, 2014
* Peter C. Moore	Director	August 1, 2014
* Lesley Hayes	Director and Chairperson	August 1, 2014
* Klaus Flock	Director	August 1, 2014

*By: *<u>/s/ Kenneth C. Barker</u>*
Kenneth C. Barker
Attorney-in-fact

EXHIBIT INDEX

Exhibit Number	Description
5.1	Opinion of McMillan LLP
23.1	Consent of McMillan LLP (included in Exhibit 5.1)
23.2	Consent of Dale Matheson Carr-Hilton LaBonte LLP
24.1	Power of Attorney (incorporated by reference from the Prior Registration Statement)

mcmillan

Our File No. 57532V-224555
Date August 1, 2014

Crailar Technologies Inc.
4420 Chatterton Way, Suite 305
Victoria, British Columbia
Canada V8X 5J2

Dear Sirs:

Re: Crailar Technologies Inc.

We have acted as legal counsel to Crailar Technologies Inc., a British Columbia corporation (the "**Company**"), in connection with the Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission (the "**Commission**") on the date hereof pursuant to Rule 462 (b) under the Securities Act of 1933, as amended (the "**Securities Act**") (such Registration Statement the "**462(b) Registration Statement**"), which incorporates by reference the Company's Registration Statement on Form S-1 filed with the Commission on April 25, 2014 (as amended and supplemented from time to time, the "**Prior Registration Statement**"), including the related prospectus which forms a part of the Prior Registration Statement (the "**Prospectus**"). The 462(b) Registration Statement and the Prior Registration Statement are referred to herein collectively as the "Registration Statements." The Registration Statements and Prospectus cover the offering of an aggregate of up to $6,500,000 in units (each a "**Unit**") (plus additional Units, common shares and/or warrants to purchase common shares pursuant to an over-allotment option). Each Unit consists of (i) one common share without par value in the capital of the Company (each a "**Share**") and (ii) one common share purchase warrant (each, a "**Warrant**"). Each Warrant entitles the holder to purchase one common share without par value in the capital of the Company (each a "**Warrant Share**").

In connection with this opinion, we have reviewed and relied upon the Registration Statements and Prospectus, the Company's Notice of Articles, the Company's Articles, records of the Company's corporate proceedings in connection with the offering, and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this opinion. With respect to the foregoing documents, we have assumed: (i) the authenticity of all records, documents, and instruments submitted to us as originals; (ii) the genuineness of all signatures on all agreements, instruments and other documents submitted to us; (iii) the legal capacity and authority of all persons or entities (other than the Company) executing all agreements, instruments or other documents submitted to us; (iv) the authenticity and the conformity to the originals of all records, documents, and instruments submitted to us as copies; (v) that the statements contained in the certificates and comparable documents of public officials, officers and representatives of the Company and other persons on which we have relied for purposes of this opinion are true and correct; and (vi) the due authorization, execution and delivery of all agreements, instruments and other documents by all parties thereto (other than the due authorization, execution and delivery of each such agreement, instrument and document by the Company). We have also obtained from officers of the Company certificates as to certain factual matters and, insofar as this opinion is based on matters of fact, we have relied on such certificates without independent investigation.

Our opinion is limited to law of the Province of British Columbia, including all applicable provisions of the British Columbia *Business Corporations Act* (the "**BC Business Corporations Act**"). We have not considered, and have not expressed any opinion with regard to, or as to the effect of, any other law, rule, or regulation, state or federal, applicable to the Company. In particular, we express no opinion as to United States federal securities laws.

Based upon the foregoing and in reliance thereon, and subject to the qualifications and limitations set forth herein, we are of the opinion that:

1. the Shares have been duly authorized and, when the Shares are issued and sold in the manner and under the terms described in the Registration Statements, will be validly issued, fully paid and non-assessable;

2. The Warrants have been duly authorized and, when issued and sold in accordance with and in the manner described in the Registration Statements, will constitute a valid and binding agreement of the Company enforceable against the Company in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, winding-up, moratorium, liquidation, fraudulent conveyance, or other similar law affecting creditors' rights, and subject to general principles of equity and to limitations on availability of equitable relief, including specific performance; and

3. The Warrant Shares have been duly authorized and, when issued and paid for upon exercise of the Warrants as contemplated by the Warrants, will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the 462(b) Registration Statement and to the use of our firm's name in the section of the Prior Registration Statement and the Prospectus included therein entitled "Legal Matters". In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended (the "**Securities Act**"), or the rules and regulations of the Commission.

This opinion is furnished in accordance with the requirements of Item 16(a) of Form S-1 and Item 601(b)(5)(i) of Regulation S-K in connection with the filing of the Registration Statements and the related Prospectus, and is not to be used, circulated, quoted or otherwise relied upon for any other purpose. This opinion is limited to the specific issues addressed herein, and no opinion may be inferred or implied beyond that expressly stated herein. We disclaim any obligation to advise you of facts, circumstances, events or developments that hereafter may be brought to our attention and that may alter, affect or modify the opinion expressed herein after the effective date of the 462(b) Registration Statement.

Yours truly,

/s/ McMillan LLP

DALE MATHESON CARR-HILTON LABONTE LLP
CHARTERED ACCOUNTANTS & BUSINESS ADVISORS

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TRI-CITIES
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WHITE ROCK
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White Rock, BC V4A 6E7
TEL 604.531.1154 | FAX 604.538.2613

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-1 dated the date hereof and filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended (the “Rule 462(b) Registration Statement”) of Crailar Technologies Inc. (the “Company”) of our report dated March 26, 2014 relating to the consolidated financial statements of the Company for its fiscal year ended December 28, 2013, and included in the Company’s Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-195508) (the “Prior Registration Statement”). In addition, we consent to the reference to our firm included under the heading “Experts” in the Prior Registration Statement incorporated by reference in the Rule 462 (b) Registration Statement.

/s/ DMCL
DALE MATHESON CARR-HILTON LABONTE LLP
CHARTERED ACCOUNTANTS

Vancouver, Canada
August 1, 2014

PARTNERSHIP OF:
VANCOUVER Robert J. Burkart, Inc. James F. Carr-Hilton Ltd. Kenneth P. Chong Inc. Alvin F. Dale Ltd. David J. Goertz, Inc. Barry S. Hartley, Inc. Reginald J. LaBonte Ltd. Robert J. Matheson, Inc. Rakesh I. Patel Inc. F.M. Yada FCA Inc. WHITE ROCK Michael K. Braun Inc. Peter J. Donaldson, Inc. TRI-CITIES G.D. Lee Inc. Fraser G. Ross, Ltd. Brian A. Shaw Inc.