PCT REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

Box No. I  TITLE OF INVENTION

CARBONATABLE CALCIUM SILICATE COMPOSITIONS AND METHODS THEREOF

Box No. II  APPLICANT

Solidia Technologies, Inc.
11 Colonial Drive
Piscataway, NJ 08854
US

Box No. III  FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

X Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV  AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

Yin Philip Zhang, Ph.D.
Attorney for Applicants
Milestone Zhang & Wu LLC
2000 Commonwealth Ave. Suite 400
Newton, MA 02466
US

E-mail authorization: Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send notifications issued in respect of this international application to that e-mail address if those offices are willing to do so.

X as advance copies followed by paper notifications; or

☐ exclusively in electronic form (no paper notifications will be sent).
<table>
<thead>
<tr>
<th>Box No. III</th>
<th>FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name and address:</strong> (Family name followed by given name, for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)</td>
<td></td>
</tr>
<tr>
<td><strong>Vahit Atakan</strong>&lt;br&gt;309 Trinity Ct., Apt #11&lt;br&gt;West Windsor, NJ 08540&lt;br&gt;US</td>
<td></td>
</tr>
</tbody>
</table>
| **This person is:**<br>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbs...
**Box No. III  FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

If none of the following sub-boxes is used, this sheet should not be included in the request.

| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's state (that is, country) of residence if no State of residence is indicated below.) |
| This person is: |
| ☐ applicant only |
| ☒ applicant and inventor |
| ☒ inventor only (If this check-box is marked, do not fill in below.) |

**Nicholas DeCristofaro**  
11 Colonial Drive  
Piscataway, NJ 08854  
US

| State (that is, country) of nationality: | State (that is, country) of residence: |
| US | US |

| This person is applicant for the purposes of: |
| ☐ all designated States |
| ☐ the States indicated in the Supplemental Box |

**Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's state (that is, country) of residence if no State of residence is indicated below.)**

| This person is: |
| ☐ applicant only |
| ☐ applicant and inventor |
| ☒ inventor only (If this check-box is marked, do not fill in below.) |

**Applicant’s registration No. with the Office**

| State (that is, country) of nationality: | State (that is, country) of residence: |
| ☐ all designated States |
| ☐ the States indicated in the Supplemental Box |

**Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this box is the applicant's state (that is, country) of residence if no State of residence is indicated below.)**

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| This person is applicant for the purposes of: |
| ☐ all designated States |
| ☐ the States indicated in the Supplemental Box |

| ☐ Further applicants and/or (further) inventors are indicated on another continuation sheet. |
**Box No. V  DESIGNATIONS**

The filing of this request **constitutes under Rule 4.9(a) the designation** of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.

- [ ] DE Germany **is not designated** for any kind of national protection
- [ ] JP Japan **is not designated** for any kind of national protection
- [ ] KR Republic of Korea **is not designated** for any kind of national protection

*The check-boxes above may only be used to exclude (irrevocably) the designations concerned if, at the time of filing or subsequently under Rule 26bis.1, the international application contains in Box No. VI a priority claim to an earlier national application filed in the particular State concerned, in order to avoid the ceasing of the effect, under the national law, of this earlier national application.*

**Box No. VI  PRIORITY CLAIM AND DOCUMENT**

The priority of the following earlier application(s) is hereby claimed:

<table>
<thead>
<tr>
<th>Filing date of earlier application (day/month/year)</th>
<th>Number of earlier application</th>
<th>Where earlier application is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>item (1)   04-AUG-2014 (August 4, 2014)</td>
<td>62/032,862       US</td>
<td></td>
</tr>
</tbody>
</table>

- [ ] item (2)
- [ ] item (3)

- [ ] Further priority claims are indicated in the Supplemental Box.

**Furnishing the priority document(s):**

- [X] The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application(s) was filed with the receiving Office which, for the purposes of this international application, is the receiving Office) identified above as:

  - [x] all items
  - [ ] item (1)
  - [ ] item (2)
  - [ ] item (3)
  - [ ] other, see Supplemental Box

- [ ] The International Bureau is requested to obtain from a digital library a certified copy of the earlier application(s) identified above, using, where applicable, the access code(s) indicated below (if the earlier application(s) is available to it from a digital library):

  - [ ] item (1) access code
  - [ ] item (2) access code
  - [ ] item (3) access code
  - [ ] other, see Supplemental Box

**Restore the right of priority:** the receiving Office is requested to restore the right of priority for the earlier application(s) identified above or in the Supplemental Box as item(s) ( ). (See also the Notes to Box No. VI; further information must be provided to support a request to restore the right of priority.)

**Incorporation by reference:** where an element of the international application referred to in Article 11(1)(ii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(ii)(d) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6.

**Box No. VII  INTERNATIONAL SEARCHING AUTHORITY**

**Choice of International Searching Authority (ISA) (if more than one International Searching Authority is competent to carry out the international search, indicate the Authority chosen, the two-letter code may be used):**

ISA/  RU
Box No. IX  CHECK LIST for EFS-Web filings - this sheet is only to be used when filing an international application with ROUS via EFS-Web

This international application contains the following:

(a) request form PCT/RO/101
   (including any declarations and supplemental sheets) .............. 5
(b) description (excluding any sequence listing part of the description, see (f) below) .............. 24
(c) claims ................................................. 3
(d) abstract ................................................. 1
(e) drawings (if any) ......................................... 28
(f) sequence listing part of the description in the form of an image file (e.g. PDF) ..............

Total number of sheets (including the sequence listing part of the description if filed as an image file) ..... 61

(g) sequence listing part of the description
   □ filed in the form of an Annex C/ST.25 text file
   □ WILL BE filed separately on physical data carrier(s), on the same day and in the form of an Annex C/ST.25 text file

Indicate type and number of physical data carrier(s) .................................................

This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):

1. □ fee calculation sheet .................................................
2. □ original separate power of attorney .................................................
3. □ original general power of attorney .................................................
4. □ copy of general power of attorney; reference number .................................................
5. □ priority document(s) identified in Box No. VI as item(s) .................................................
6. □ Translation of international application into (language) .................................................
7. □ separate indications concerning deposited microorganism or other biological material .................................................
8. □ (only where item (f) is marked in the left column) copy of the sequence listing in electronic form (Annex C/ST.25 text file) not forming part of the international application but furnished only for the purposes of international search under Rule 13ter .................................................
9. □ (only where item (f) is marked in the left column) a statement confirming that "the information recorded in electronic form submitted under Rule 13ter is identical to the sequence listing as contained in the international application" as filed via EFS-Web .................................................
10. □ copy of results of earlier search(es) (Rule 12bis.1(a)) .................................................
11. □ other (specify) .................................................

Box No. X  SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

/Yin P. Zhang 44,372/
Yin Philip Zhang, Ph.D., Reg. No. 44,372
Attorney for Applicant(s)
Milstein Zhang & Wu LLC
2000 Commonwealth Ave. Suite 400
Newton, MA 02466, USA

Date of actual receipt of the purported international application: 03 AUG 2015 (03-08-15)
Date of timely receipt of the required corrections under PCT Article 11(2): RU
International Searching Authority (if two or more are competent): ISA /
Transmital of search copy delayed until search fee is paid

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

See Notes to the request form

Form PCT/RO/101 (last sheet - EFS) (16 September 2012)