Synergistic method for host cell transformation.

This invention addresses the problem of inserting foreign or non-native DNA into a cell and, most particularly, into a plant cell. The solution to this problem of DNA transfer set forth in this invention is the use of a polycationic compound and cationic liposomes which act synergistically to accomplish host cell transformation.
### Documents Considered to Be Relevant

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document with indication, where appropriate, of relevant passages</th>
<th>Relevant to claim</th>
<th>Classification of the Application (Int. Cl.)</th>
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The present search report has been drawn up for all claims.

**Place of search**: THE HAGUE

**Date of completion of the search**: 08-01-1991

**Examiner**: MADDOX A.D.

**Category of cited documents**

- **X**: particularly relevant if taken alone
- **Y**: particularly relevant if combined with another document of the same category
- **A**: technological background
- **O**: non-written disclosure
- **P**: intermediate document

**Classification of the Application (Int. Cl.)**

- **C 12 M 15/88**
- **C 12 M 15/87**
- **C 12 M 15/82**
- **C 12 N**
### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:  
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:


- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:  
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: 1-14, 20-33
**DOCUMENTS CONSIDERED TO BE RELEVANT**

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<td>THEOR. APPL. GENET., vol. 80, no. 3, 1990, pages 395-401; N.M. ANTONELLI et al.: &quot;Genomic DNA can be used with cationic methods for highly efficient transformation of maize protoplasts&quot; * Whole article *</td>
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<td>D,A</td>
<td>PROC. NATL. ACAD. SCI. USA, vol. 84, November 1987, pages 7413-7417; P.L. FELGNER et al.: &quot;Lipofection: A highly efficient, lipid-mediated DNA-transfection procedure&quot; * Whole article *</td>
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**TECHNICAL FIELDS SEARCHED (Int. Cl.5)**

- X: particularly relevant if taken alone
- V: particularly relevant if combined with another document of the same category
- A: technological background
- P: intermediate document
- T: theory or principle underlying the invention
- E: earlier patent document, but published on, or after the filing date
- D: document cited in the application
- L: document cited for other reasons
- M: member of the same patent family, corresponding document

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The present search report has been drawn up for all claims.

**THE HAGUE** 08-01-1991

**MADDOX A.D.**