## NC Path Language Description

<path> ::= <path step>
| ( <path step> ... )
| ( <path> )
| ( <path> <repeater exp>)

<path step> ::= <path step descriptor>
| ( <path step op> <path step> ... )

<path step descriptor> ::= <literal descriptor>
| <functional descriptor>
| ANY
| <lisp-variable>

<literal descriptor> ::= <link-type>
| @<card-type>
|_<link-type>
|_@<card-type>

<functional descriptor> ::= #<lisp-link-predicate>
| @#<lisp-card-predicate>
|_#<lisp-link-predicate>
|_@#<lisp-card-predicate>

<path step op> ::= OR | AND | NOT

<repeater exp> ::= <repeater token>
| <repeater token> <depth cutoff>

<repeater token> ::= + | *

<depth cutoff> ::= <positive integer>

<positive integer> ::= <digit> | <digit> <positive integer>

<digit> ::= 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0

Notes:
1) The characters #, @, and _ are called the prefix of a path step descriptor, and their order is unimportant.
2) Note that <lisp-variable> `must have` a value parseable as a <path step descriptor>.