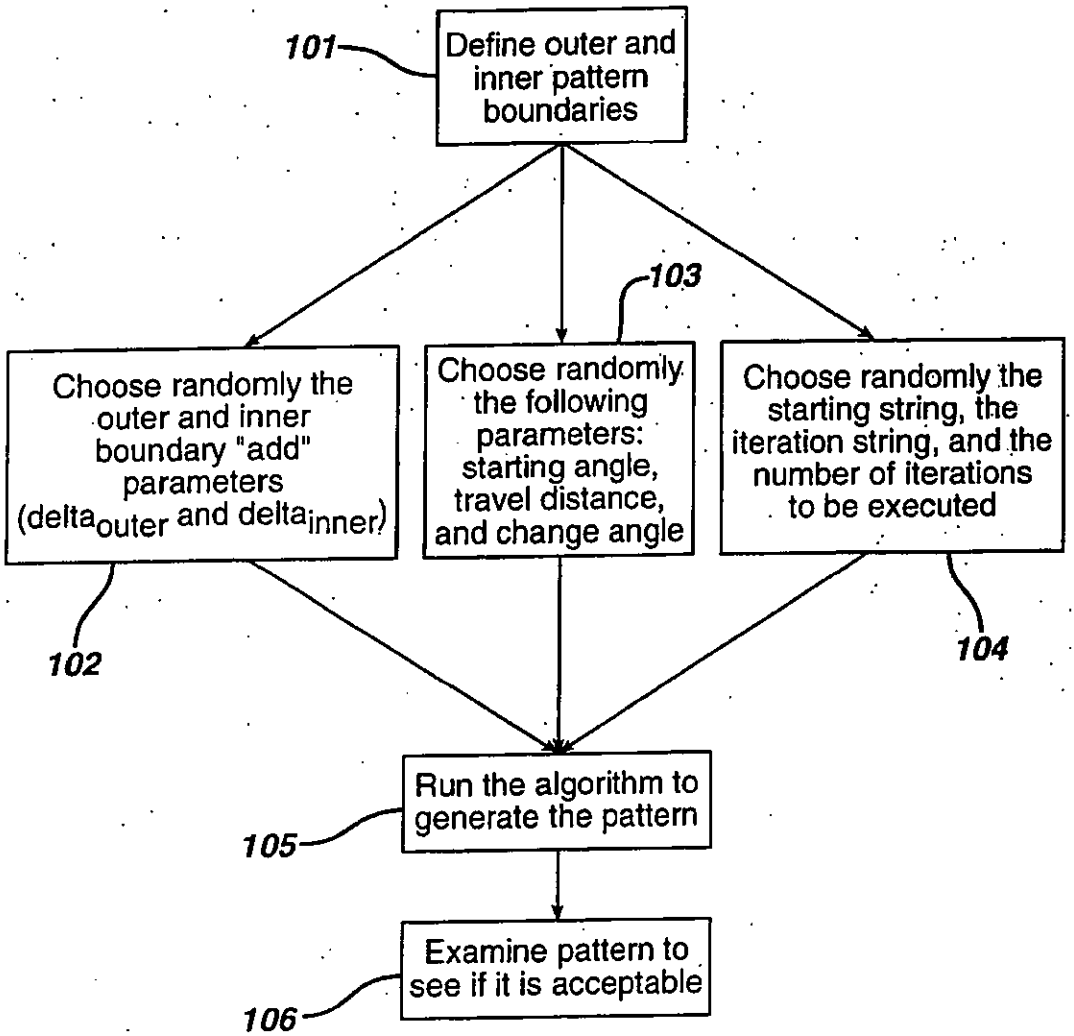
FIG. 1


101
Define outer and inner pattern boundaries
103
Choose randomly the outer and inner boundary "add" parameters (delta$_{outer}$ and delta$_{inner}$)
Choose randomly the following parameters: starting angle, travel distance, and change angle
Choose randomly the starting string, the iteration string, and the number of iterations to be executed
102
104
Run the algorithm to generate the pattern
105
Examine pattern to see if it is acceptable
106

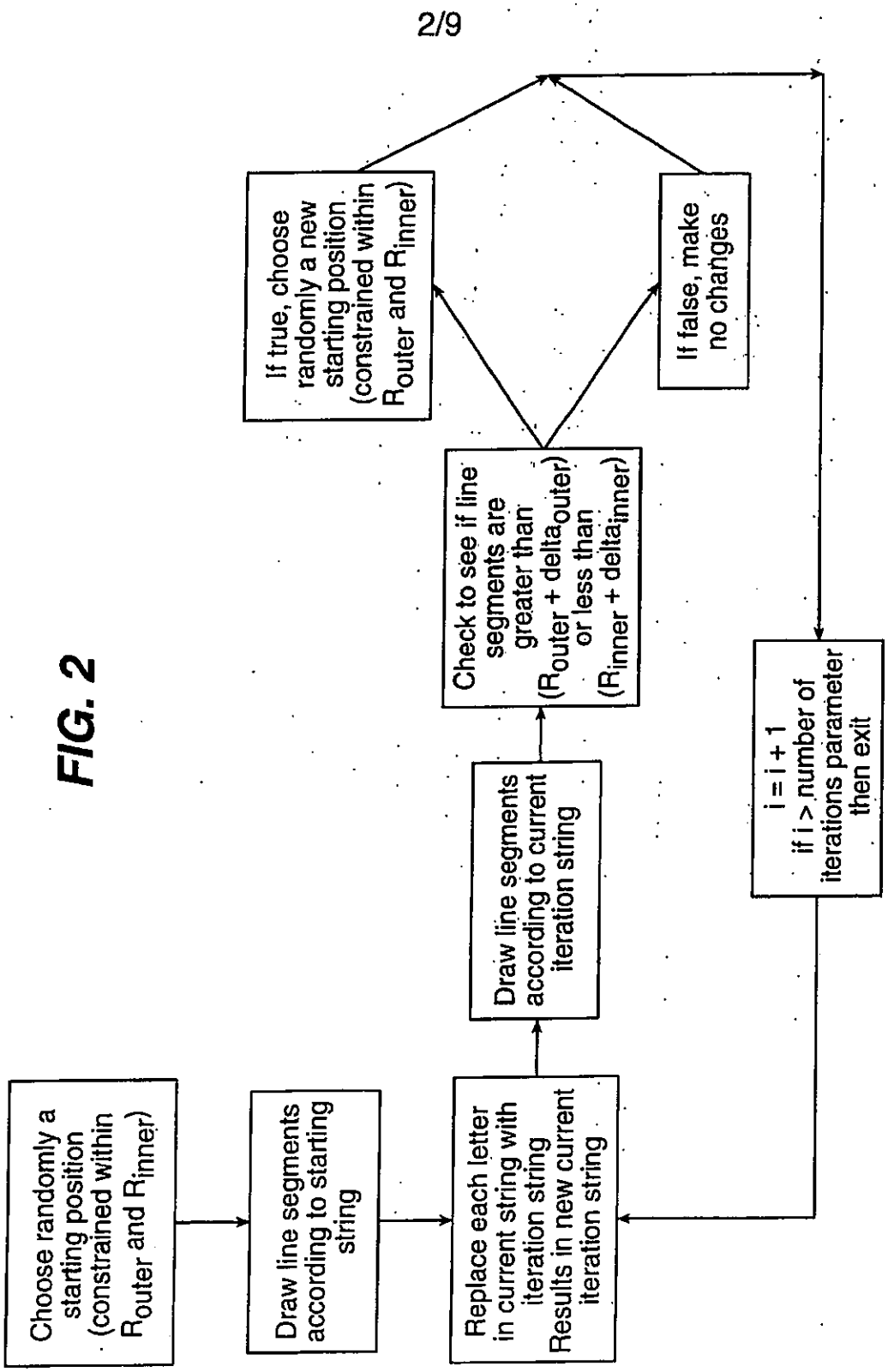

Choose randomly a starting position (constrained within R_{outer} and R_{inner})
Draw line segments according to starting string
Replace each letter in current string with iteration string Results in new current iteration string
Draw line segments according to current iteration string
Check to see if line segments are greater than (R_{outer} + $delta_{outer}$) or less than (R_{inner} + $delta_{inner}$)
If true, choose randomly a new starting position (constrained within R_{outer} and R_{inner})
If false, make no changes
i = i + 1 if i > number of iterations parameter then exit

FIG. 2

FIG. 3

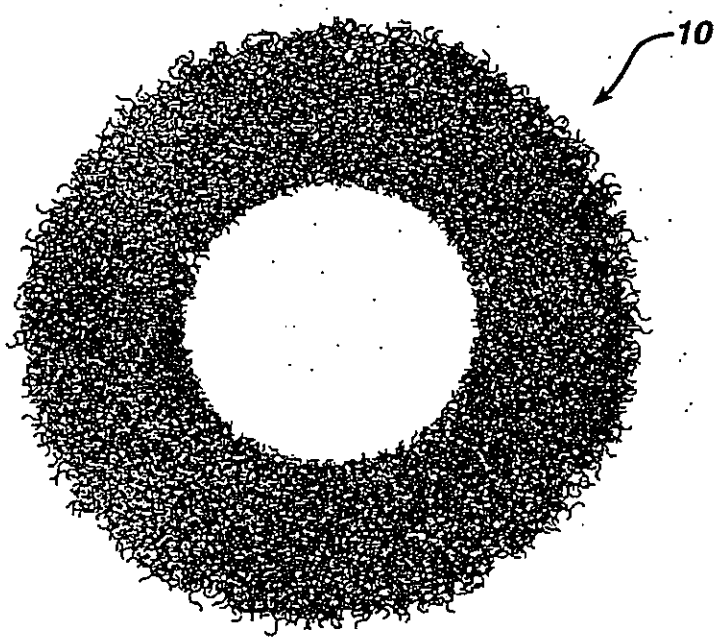


FIG. 4

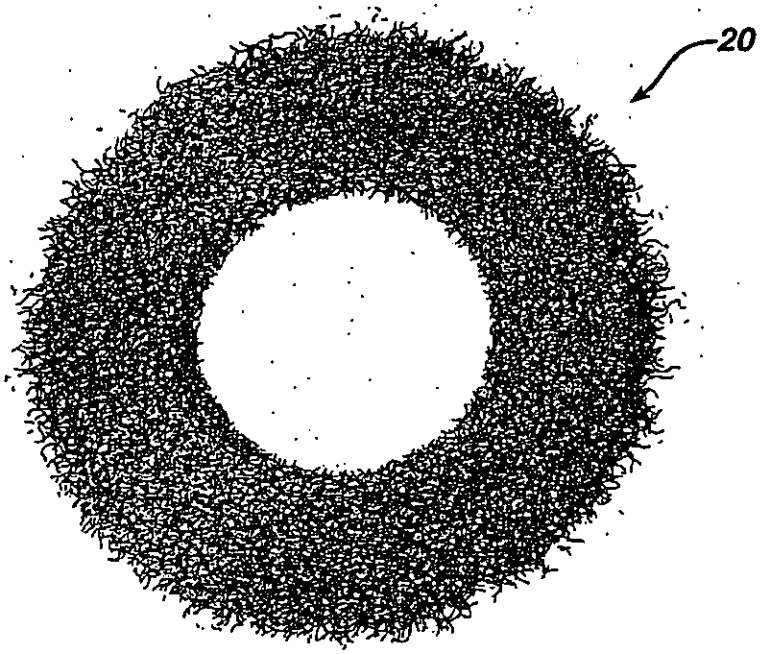


FIG. 5

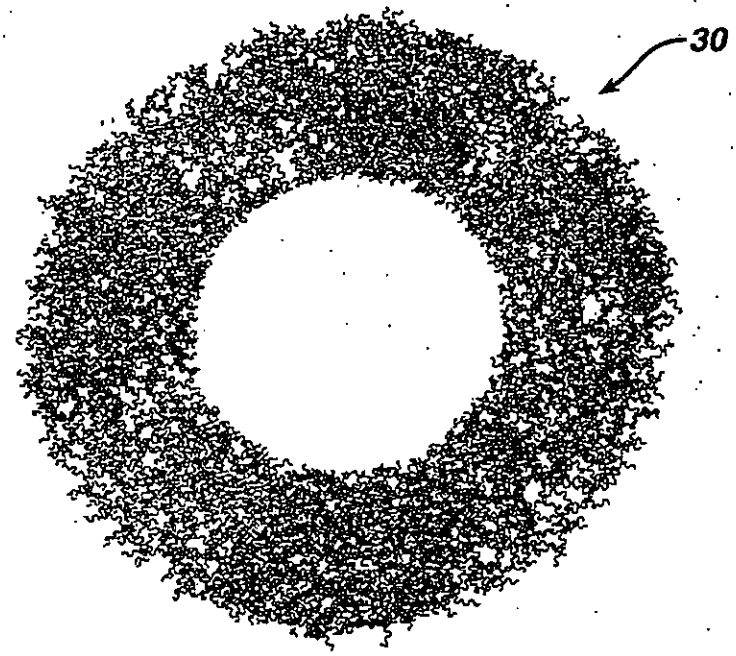


FIG. 6

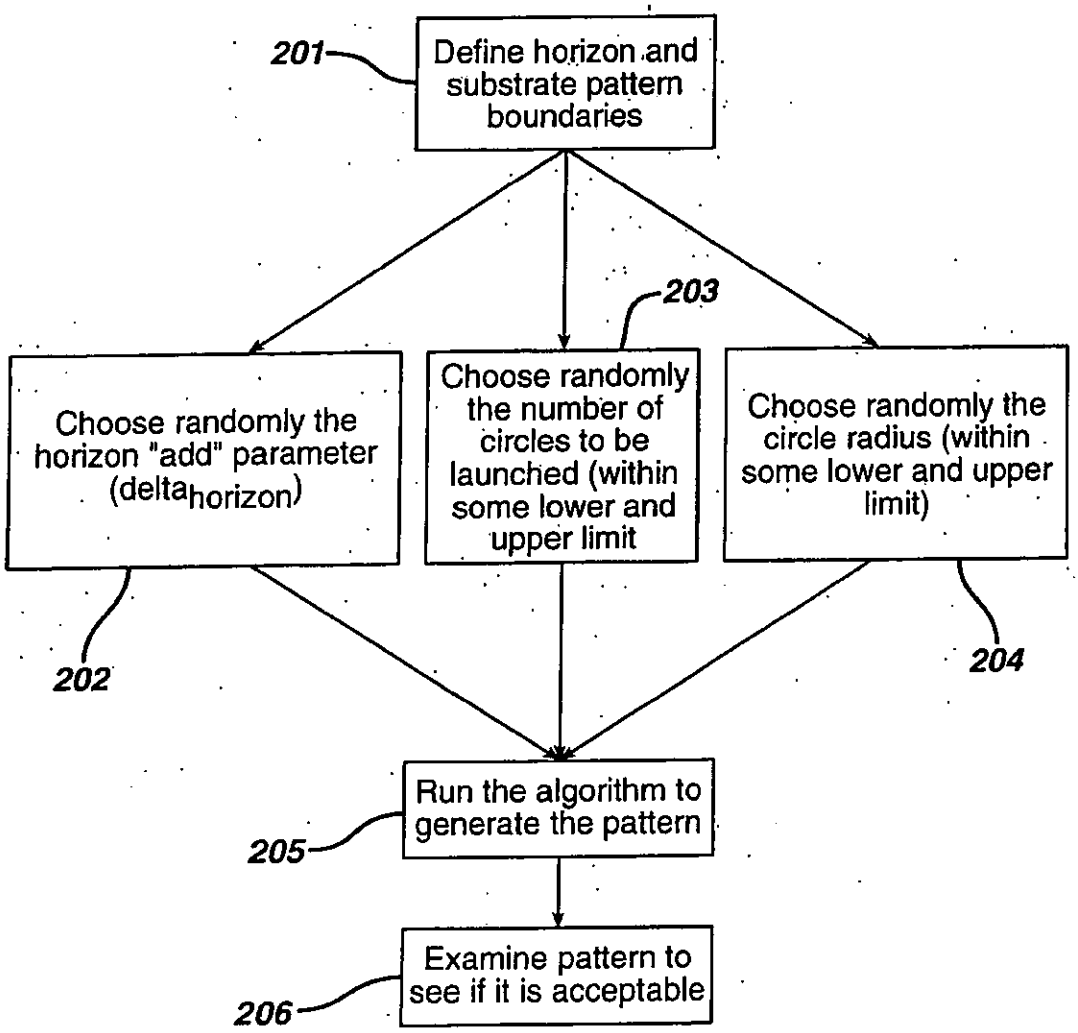

201
Define horizon and substrate pattern boundaries
203
Choose randomly the horizon "add" parameter (delta$_{horizon}$)
Choose randomly the number of circles to be launched (within some lower and upper limit
Choose randomly the circle radius (within some lower and upper limit)
202
204
Run the algorithm to generate the pattern
205
Examine pattern to see if it is acceptable
206

FIG. 7

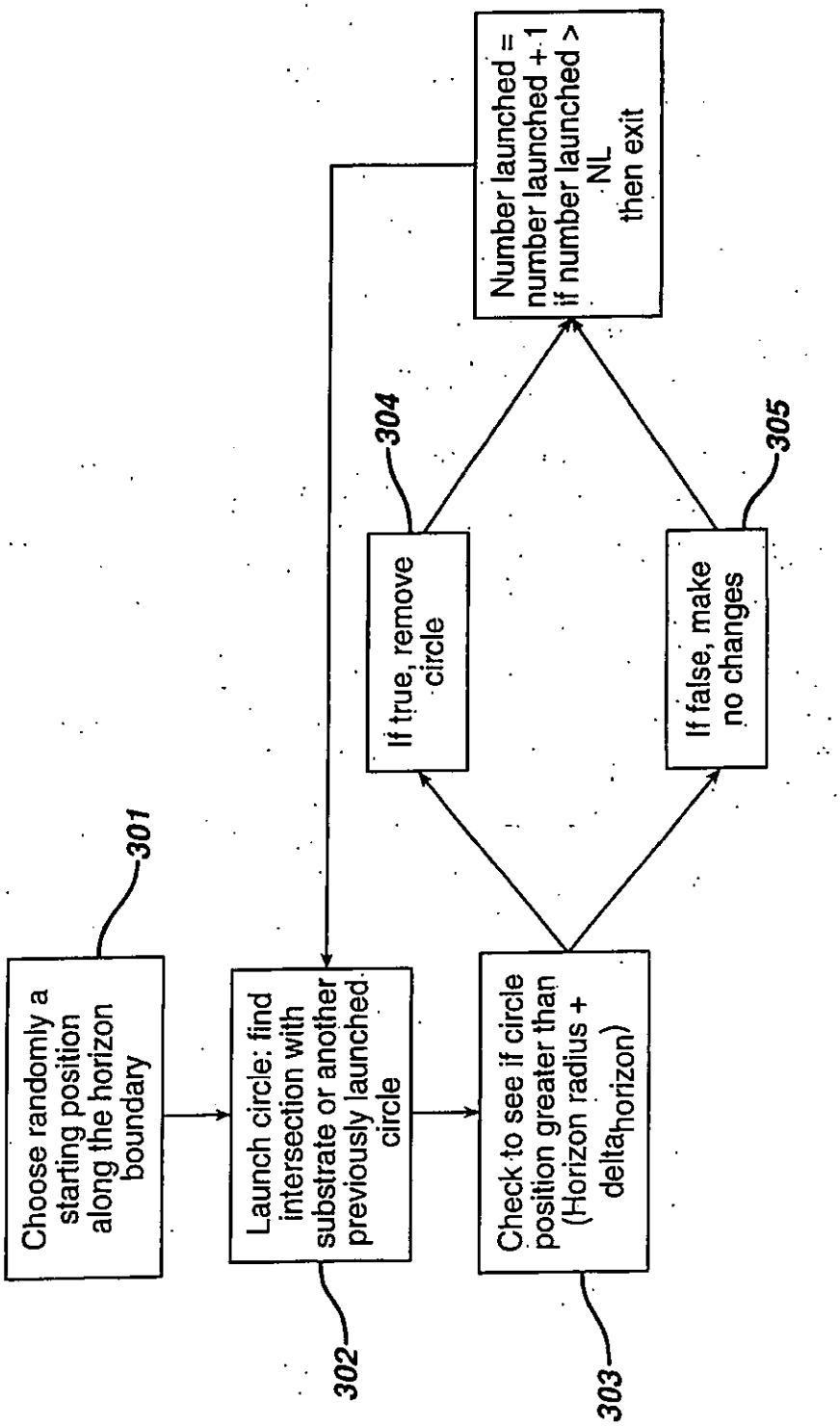

Choose randomly a starting position along the horizon boundary
301
Launch circle: find intersection with substrate or another previously launched circle
302
Check to see if circle position greater than (Horizon radius + delta horizon)
303
If true, remove circle
304
If false, make no changes
305
Number launched = number launched + 1 if number launched > NL then exit

FIG. 8

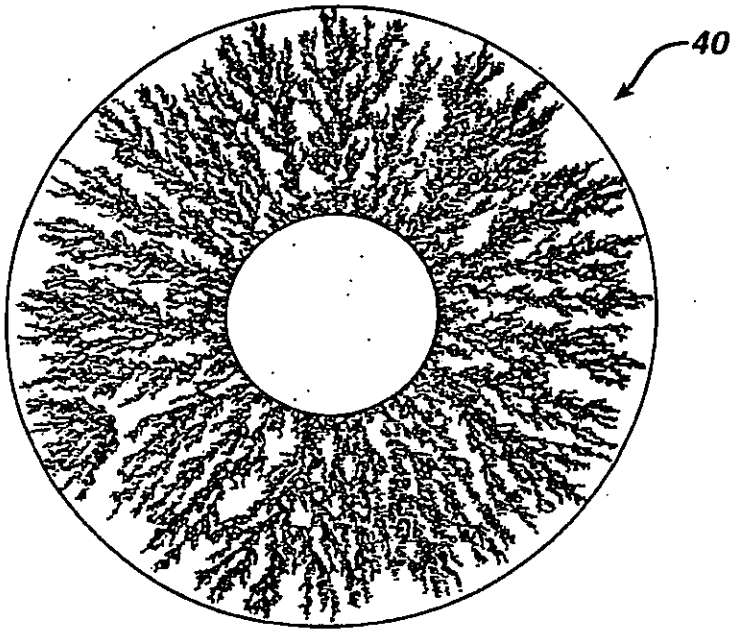


FIG. 9

