SUBROUTINE OPSRCH

## Description

This subroutine performs the pattern search optimization scheme.

Calling Sequence
CALL OPSRCH (A, MA, IEND, IPASS1, OA, MOA, ILOCOA, MILOC, NUMA, IZY, NCOUN, NN, IPMOVE)

Argument List

| Variable | Input/ Output | Type | Dimension | Description |
| :---: | :---: | :---: | :---: | :---: |
| A | Both | R | MA | Array containing values of the parameters to be optimized. This array is updated no more than MAXN times. |
| MA | Input | I | 1 | Dimension of the A array |
| IEND | Both | I | 1 | ```Search completion flag for the pattern search option 1 = complete-terminate OPT3 0 = not complete``` |
| IPASS 1 | Input | I | 1 | ```Indicates first pass or subsequent pass through OPT 1 = first pass 0 = subsequent pass``` |
| OA | Both | R | MOA | The entire OA array. Contains the information for each of the parameters being optimized. Only when resolution moves are made (deltas halved) is the OA array output. |
| MOA | Input | I | 1 | Dimension of the OA array |
| ILOCOA | Input | I | MILOC | An integer array containing pointers to the beginning of the OA array for each parameter |
| MILOC | Input | I | 1 | Dimension of the OA array |
| NUMA | Input | I | 1 | Number of the parameters to be optimized (NUMA $=$ NPARM) |
| IZY | Both | I | 1 | Parameter from the A array, currently being optimized |
| NCOUN | Both | I | 1 | Number of trials for the pattern search option |
| NN | Both | I | 1 | Number of runs for the pattern search option |
| IPMOVE |  |  |  | Not referenced anywhere |

