example has contained edge-reflection contacts, vertex-bending reflection contacts, and passing-through contacts three cases of OPT(L) contacted with P_i mentioned above.

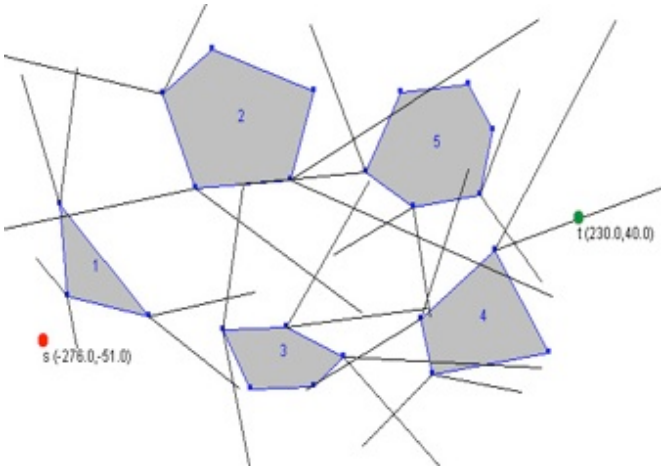

Fig. (9). The Last Step Shortest Path Map M_i for P_i (i=1,…, 5).

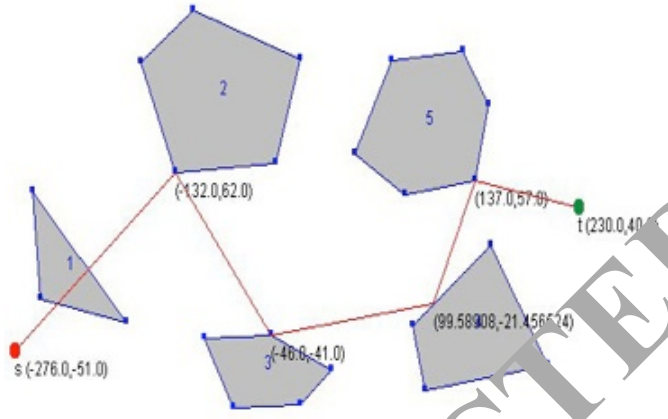

Fig. (10). The Running Result of Disjoint Convex Polygons, for k=5.

CONCLUSION

In this paper, we presented an efficient algorithm of locating the path points in computing the shortest path of touring a sequence of disjoint convex polygons and we give an $O(kn)$ time solution, where k is the number of polygons and n is the total number of vertices of the polygons. Our results improve upon the previous time $O(nk\log(n/k))$.

This research has made preliminary results. A more efficient time solution to the problem of touring disjoint and convex polygons problem is an open problem. In addition, finding the shortest path of touring the convex polygons possibly intersected is also our further study.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflict of interest.

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