

# 쌍대내부점 기법을 이용한 최소비용흐름문제의 해법연구

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## ABSTRACT

The minimum cost flow problem(MCFP) is a classical problem in combinatorial optimization and has many practical applications : telecommunication, traffic, material handling. Wallacher and Zimmermann proposed a primal interior point method for MCFP which finds a search direction by detecting a negative cycle . We presented a dual interior point method which finds a search direction by detecting a positive cut . This dual approach resulted in  $O(n^2mL)$  algorithm for dense network , where  $m$  denotes the number of arcs,  $n$  denotes the number of nodes and  $L$  denotes the total length of the input data .

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