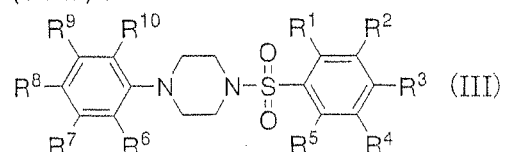


ABSTRACT

METHOD FOR PRODUCING N-PHENYL-N'-PHENYLSULFONYLPIPERAZINE DERIVATIVE

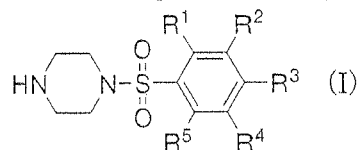
The present invention provides a method of efficiently producing N-phenyl-N'-phenylsulfonyl piperazine derivative and intermediate thereof.

A method of producing a compound represented by Formula (III):



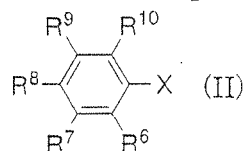
wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^9 , and R^{10} are as defined below;

including reacting a compound represented by Formula (I):



wherein R^1 , R^2 , R^3 , R^4 , and R^5 each independently represent hydrogen atom, halogen atom, optionally substituted alkyl, optionally substituted alkyloxy and on the like;

with a compound represented by Formula (II):



wherein R^6 , R^7 , R^8 , R^9 , and R^{10} each independently represent hydrogen atom, halogen atom, hydroxy, optionally substituted heteroaryl and the like; X represents halogen atom and the like; in a solvent in the presence of a palladium compound, an organic phosphorus compound, and a base.