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(54) **Title:** IMPROVED PROCESS FOR THE PREPARATION OF 7-(MORPHOLINYL)-2-(N-PIPERAZINYL)METHYLTHIENO[2, 3-C]PYRIDINE DERIVATIVES

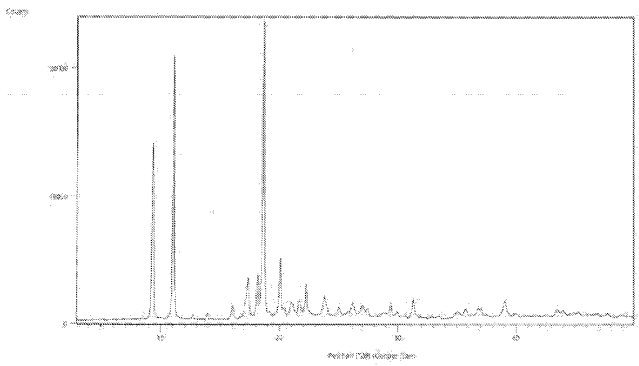
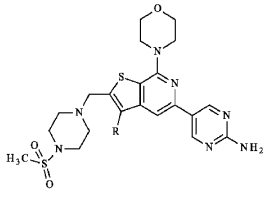


FIG-1



.2CH3SO3H. xH2O

Formula (I)

(57) **Abstract:** The present invention describes an improved second generation process for the synthesis of NRC-1111 (1,5-[2-[[4-(methylsulfonyl)-1-piperazinyl]methyl]-7-(4-morpholinyl)thieno[2,3-c] pyridine-5-yl]-2-pyrimidinamine) dimethane sulfonate and NRC-1109 (II, 5-[3-methyl-2-[(4-methylsulfonylpiperazin-1-yl)methyl]-7-morpholino-thieno[2,3-c]pyridin-5-yl]pyrimidin-2-amine) dimethane sulfonate. This process is cost effective, high yielding and industrially feasible process for the synthesis of compounds of formulae I and II with high purity. Formula (I) Formula (I): R = H for NRC-1111 and Formula (II): R = CH3 for NRC-1109 NRC-1111 and NRC-1109 are potential anti-cancer agents.

[Continued on next page]

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