Global existence and uniqueness for the Cahn-Hilliard equation with Wentzell boundary conditions

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This problem was proposed by physicists to describe spinodal decomposition of binary mixtures when the effective interactive between the wall and two mixtures components is short ranged. Here, in this paper, I propose different boundary conditions than those found in literature and earlier papers (R. Racke&S. Zheng 2003, J. Pruss 2001 and the references cited there in). The global existence and uniqueness of solutions to the initial boundary value problem with highest-order (that is, fourth order) boundary conditions is proved.