

GAS REPLACEMENT PROCESS, GAS REPLACEMENT APPARATUS, AND NITRO COMPOUND HYDROGENATION REACTION PROCESS

Abstract

5 The present invention relates to a gas replacement process, a gas replacement apparatus, and use of
the gas replacement process or apparatus in the nitro compound hydrogenation reaction process. The
gas replacement process at least comprises a first step of subjecting a stream to be replaced to the gas
replacement in presence of a first replacement gas, and then a second step of subjecting to the gas
replacement in presence of the second replacement gas, wherein assuming the superficial velocity of
10 the first replacement gas is V_1 , and the superficial velocity of the second replacement gas is V_2 , then
 $V_2/V_1 \geq 1.5$. The gas replacement process or apparatus has the advantages of high gas replacement
efficiency and the like.

[Figure 1]

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