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(74) Agents: **ISHIDA, Takashi** et al.; A. AOKI, ISHIDA &
ASSOCIATES, Toranomom 37 Mori Bldg., 5-1, Tora-
nomom 3-chome, Minato-ku, Tokyo 105-8423 (JP).

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(71) Applicant (*for all designated States except US*): **SHOWA
DENKO K. K.** [JP/JP]; 13-9, Shiba Daimon 1-chome, Mi-
nato-ku, Tokyo 105-8518 (JP).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **OHNO, Hiromoto**
[JP/JP]; C/O Production & Technology Control Depart-
ment, Gases & Chemicals Division., SHOWA DENKO
K.K., 5-1, Ogimachi, Kawasaki-ku, Kawasaki-shi, Kana-
gawa 210-0867 (JP). **OHI, Toshio** [JP/JP]; C/O SHOWA
DENKO K.K., 13-9, Shiba Daimon 1-chome, Minato-ku,
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(54) Title: PRODUCTION AND USE OF HEXAFLUOROETHANE

(57) Abstract: A process for production of high-purity hexafluoroethane, wherein a mixed gas containing hexafluoroethane and chlorotrifluoromethane is reacted with hydrogen fluoride in a gas phase in the presence of a fluorination catalyst at 200-450°C, for fluorination of the chlorotrifluoromethane, or wherein pentafluoroethane containing chlorine compounds with 1-3 carbon atoms is reacted with hydrogen in a gas phase in the presence of a hydrogenation catalyst at 150-400°C, and the product is then reacted with fluorine in a gas phase in the presence of a diluent gas.



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