

ABSTRACT

A novel olefin production process of the invention can
5 be established as an industrial and practical process of
producing an olefin with high selectivity by directly reacting
a ketone and hydrogen in a single reaction step. In particular,
a novel olefin production process is provided in which propylene
is obtained with high selectivity by directly reacting acetone
10 and hydrogen. An olefin production process of the invention
includes reacting a ketone and hydrogen at a reaction
temperature in the range of 50 to 300°C in the presence of a
Cu-containing hydrogenation catalyst and a solid acid
substance.