CLAIMS

1. A catalyst for producing isobutylene which is an oxide consisting of tungsten and at least one element selected from a group B
Group B: tantalum, niobium, and titanium.

2. The catalyst for producing isobutylene according to claim 1, wherein the oxide is a complex oxide.

3. The catalyst for producing isobutylene according to claim 1, wherein a ratio (A/B) of a A of the numbers of moles of tungsten to a total B of the numbers of moles of tantalum, niobium, and titanium is from 0.1 to 10.

4. The catalyst for producing isobutylene according to claim 1, wherein B is tantalum.

5. The catalyst for producing isobutylene according to claim 4, wherein a ratio (A/B) of a A of the numbers of moles of tungsten to a total B of the numbers of moles of tantalum is from 1.0 to 9.0.

6. The catalyst for producing isobutylene according to claim 1, wherein B is niobium.

7. The catalyst for producing isobutylene according to claim 6, wherein a ratio (A/B) of a A of the numbers of moles of tungsten to a total B of the numbers of moles of niobium is from 0.25 to 4.0.

8. The catalyst for producing isobutylene according to claim 1, wherein B is titanium.

9. The catalyst for producing isobutylene according to claim 8, wherein a ratio (A/B) of a A of the numbers of moles of tungsten to a total B of the numbers of moles of titanium is from 2.0 to 8.0.