

Abstract of the Invention

In an oxide cathode comprising a metal base, an electron emissive material layer containing at least Ba formed on the metal base, and a means for heating the electron emissive material layer, the electron emissive material layer further comprises at least one of a lanthanum oxide and a terbium oxide, and forms a needle-shaped crystal structure, or the electron emissive material layer further comprises at least one of a lanthanum oxide and a terbium oxide, and the metal base is subject to a heat treatment under vacuum. The oxide cathode has an effect on lengthening the lifetime, and has a manufacturing procedure interchangeable with a conventional one.

This Sheet Has Been Replaced

