

PATENT APPLICATION

for:

PROCESS FOR MELTING A CHARGE IN A FURNACE

in the name of:

L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE
ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE

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VIRAIZE

ABSTRACT

This process is intended for melting a charge in a furnace, in particular an electrical furnace for melting scrap for the production of steel, by supplying energy of fusion to the charge and with post-combustion of the fumes by injecting an oxygen-containing gas into the furnace space above the charge. The oxygen-containing gas is injected in the form of a plurality of jets, each one of which has a flow rate of between approximately 50 and 1,200 Sm³/h and an injector (11, 12) outlet speed of between approximately 10 and 150 m/s.

Figure 5.