

**TURBOMACHINE COMPRISING A DETONATION CHAMBER AND A FLYING
VEHICLE FITTED WITH SUCH A TURBOMACHINE**

ABSTRACT

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The invention relates to a turbine engine including a detonation chamber and an aircraft provided with such a turbine engine. The chamber (4) of the turbine engine (1) comprises a continuous detonation wave engine (6) provided with an annular detonation chamber (7) and associated means (8, 9) that can be used to generate a continuous
10 production of hot gases from a detonation mixture of fuel and air. The continuous detonation wave engine (6) is arranged such as to form, from a flow of incoming air (E), a first flow (F1) which enters the detonation chamber (7) and which is used by the engine (6) and a second flow (F2) which bypasses the chamber. The turbine engine (1) also includes auxiliary means (10) for mixing the hot gases (F3) leaving the detonation chamber (7) with the second
15 flow of air (F2) before directing same towards the turbine (5). A plurality of detonation chambers (7) are arranged concentrically to one another relative to the axis of the turbine engine.

(Fig. 1)