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(54) **SELF-CONTAINING LACTOBACILLUS STRAIN**

(75) Inventors: **Lothar Steidler**, Bandon (IE); **Pieter Rottiers**, De Pinte (BE); **Erik Remaut**, Vinderhoute (BE)

Correspondence Address:

TRASK BRITT
P.O. BOX 2550
SALT LAKE CITY, UT 84110 (US)

(73) Assignees: **Vlaams Interuniversitair Instituut Voor Biotechnologie VZW**, Zwijnaarde (BE); **Universiteit Gent**, Gent (BE)

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(57) **ABSTRACT**

The invention relates to a recombinant *Lactobacillus* strain, with limited growth and viability in the environment. More particularly, it relates to a recombinant *Lactobacillus* that can only survive in a medium, where well-defined medium compounds, preferably thymidine or thymine, are present. A preferred embodiment is a *Lactobacillus* that may only survive in a host organism, where the medium compounds are present, but cannot survive outside the host organism in absence of the medium compounds. Moreover, the *Lactobacillus* strain can be transformed with prophylactic and/or therapeutic molecules and can, as such, be used to treat diseases such as, but not limited to, inflammatory bowel diseases.