

Genetic Engineering in Cyanobacteria

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In re Application of: Aladar A. Szalay and John G. K. Williams
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For: **GENETIC ENGINEERING IN CYANOBACTERIA**

Status

Patent issued October 18, 1988.

Related Files or Patent Applications

None pending.

Summary of Technology

This patent discloses a procaryotic microorganism and a method for its production is provided wherein the microorganism contains at least one stable foreign DNA portion in the chromosome. The disclosed microorganisms and their progeny are substantially free of genetic rearrangement involving the foreign DNA. In a preferred embodiment, cyanobacteria are employed. The microorganisms are produced by introducing into the cell an insertion vehicle that contains foreign DNA ligated between two portions of DNA homologous to adjacent portions of the recipient's chromosome.

Claim Coverage

The claims generally are directed to a cyanobacterium containing at least one stable foreign DNA portion covalently bonded directly to two originally adjoining segments of its chromosomal DNA oriented in relation to each other in the same manner as the segments are in the cyanobacterium, wherein the cyanobacterium and its progeny are substantially free of genetic rearrangement involving the foreign DNA and wherein the foreign DNA portion is derived from a source other than the genus of the cyanobacterium and is other than a transposable element.