ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

Device for harvesting energy from a fluidic flow including a thin film of piezoelectric material

INVENTORS

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DESCRIPTION

A device for harvesting energy from a fluidic flow,
comprising a flexible structure including:

- a base layer;
- a first conductive layer, formed by a first conductive material and arranged on top of the base layer;
- a first piezoelectric layer , formed by a first piezoelectric material and arranged on top of the first conductive layer;

wherein the base layer, the first conductive layer and the first piezoelectric layer form a crystalline structure including a plurality of pseudomorph portions.

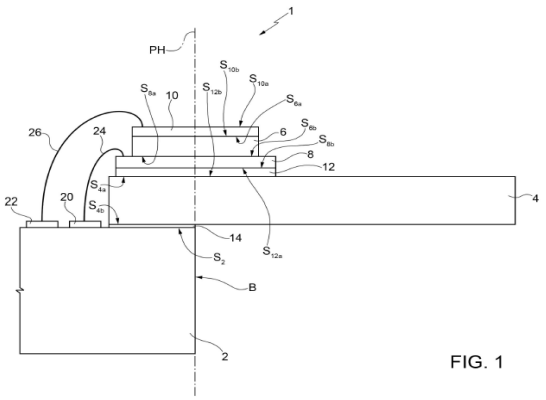

FIG. 1

APPLICATIONS

Wind turbine, wind mill, water mill, bioclimatic architecture, green buildings

KEYWORDS

Piezoelectric, energy harvesting, wind, fluid, karman street, sputtering, flexible.

BIBLIOGRAPHIC DATA

Dispositivo Per Raccogliere Energia Da Un Flusso Fluidico Includente Un Film Sottile Di Materiale Piezoelettrico	
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Applicants	Fondazione Istituto Italiano di Tecnologia

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