

Title (en)
FOOD FRESHNESS SENSOR

Title (de)
LEBENSMITTELFrischeSensor

Title (fr)
CAPTEUR DE FRAICHEUR D'ALIMENTS

Publication
EP 1828401 A2 20070905 (EN)

Application
EP 05848828 A 20051206

Priority
• US 2005043843 W 20051206
• US 63375004 P 20041207

Abstract (en)
[origin: WO2006062870A2] A sensor for detecting a presence of bacteria in a perishable food includes a pH sensitive solution of bromothymol blue and methyl red mixed with an alkaline resulting in a pH value and a generally green color changing to a generally orange color responsive to exposure to a concentration of carbon dioxide. The solution is packaged in a gas permeable container using a TPX (PMP) thin film that allows an effective diffusion of carbon dioxide through the container. The pH level drops when acidic carbon dioxide comes into contact with the solution resulting from a formation of carbonic acid, making the solution an indicator of carbon dioxide concentration, and thus an indication of bacterial growth.

IPC 8 full level
C12M 1/34 (2006.01); **C12Q 1/04** (2006.01); **G01N 33/02** (2006.01)

CPC (source: EP)
C12Q 1/04 (2013.01); **C12Q 1/22** (2013.01); **G01N 33/02** (2013.01); **G01N 33/12** (2013.01)

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WO 2006062870 A2 20060615; WO 2006062870 A3 20061116; AR 051789 A1 20070207; CA 2590091 A1 20060615; EP 1828401 A2 20070905; EP 1828401 A4 20081217; JP 2008523391 A 20080703

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US 2005043843 W 20051206; AR P050105125 A 20051207; CA 2590091 A 20051206; EP 05848828 A 20051206; JP 2007545538 A 20051206