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(54) Title: HYDROGEL COMPOSITION DEMONSTRATING PHASE SEPARATION

(57) Abstract: A composition is provided, wherein the composition comprises a water-swellable, water-insoluble polymer or a water-soluble polymer, a blend of a hydrophilic polymer and a complementary oligomer capable of hydrogen bonding to the hydrophilic polymer. The composition also includes a second water-swellable, water-insoluble polymer that provides for a phase separating film forming composition. Active ingredients, such as a whitening agent, may be included. The composition finds utility as an oral dressing, for example, a tooth whitening composition that is applied to the teeth in need of whitening, and removed when the degree of whitening has been achieved. In certain embodiments, the composition is translucent. Methods for preparing and using the compositions are also disclosed.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/15448

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 13/00
 US CL : 424/443, 449

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 424/443, 449

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,945,457 A (PLATE et al.) 31 August 1999, abstract, col.3, lines 40-45; col.5, lines 1-4, 20-56; col.6, lines 25-51; col.8, lines 19-20, 33-35; col.9, lines 51-67; col.10, lines 1-3.	1-38
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Y		39-44

Further documents are listed in the continuation of Box C.

See patent family annex.

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search

26 October 2004 (26.10.2004)

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/15448

Continuation of B. FIELDS SEARCHED Item 3:
WEST, ALL DATABASES
Search terms: hydrogel, water swellable polymer, hydrophilic polymer