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(54) Title: METHOD AND SYSTEM FOR PREPARING SOFT TISSUE FOR GRAFTING, ENHANCING GRAFTING RESULTS, AND GRAFTING AUTOLOGOUS FAT AND ADIPOCYTE DERIVED STEM CELLS TO SOFT TISSUE SUCH AS THE BREAST AND OTHER TISSUE DEFECTS

(57) Abstract: A method is disclosed for preparing a soft tissue site, and augmenting the soft tissue site, such as the breast(s), scar, depression, or other defect, of a subject through use of devices that exert a distractive force on the breast(s) and grafting of autologous fat tissue such as domes with sealing rims for surrounding each of the soft tissue site and a regulated pump. The method for preparing the soft tissue site, and enhancing fat graft results, entails application of the distracting force to the targeted soft tissue site at least intermittently for some period of time and preferably several weeks prior to the graft procedure. A related aspect of the invention includes following the preparation steps by transfer of fat from other areas of the subject to the subject's soft tissue site, and then reapplication of the distractive force to the soft tissue site that received the autologous fat graft. Alternatively, fat from genetically related sources may be used, and the fat may be further processed prior to injection. Substantial soft tissue augmentation, high rates of graft survival and negligible graft necrosis (data demonstrating 80% survival and only 20% necrosis is presented) or calcification result from the practice of these methods.

**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **A61K 48/00**( 2006.01)  
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 USPC: 424/93.21,93.7;435/366  
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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 424/93.21, 93.7; 435/366

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)  
 EAST (all)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/0025755 A1 (HENDRICK et al) 03 February 2005 (03.02.2005), see entire document.	1-46

Further documents are listed in the continuation of Box C.       See patent family annex.

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