

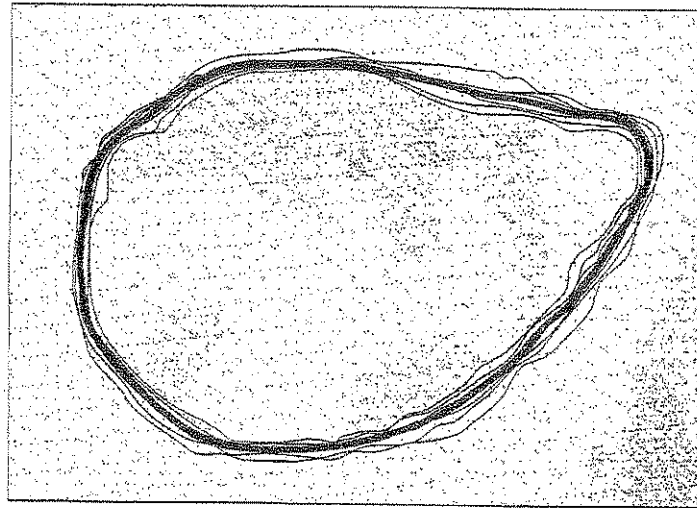


FIG. 1A

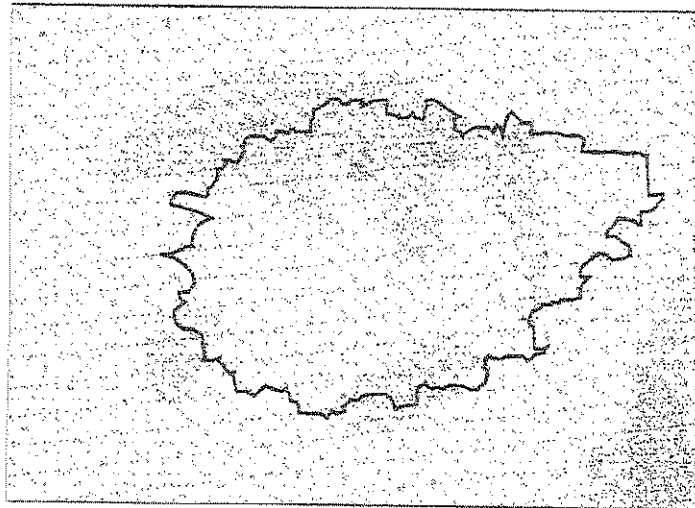


FIG. 1B

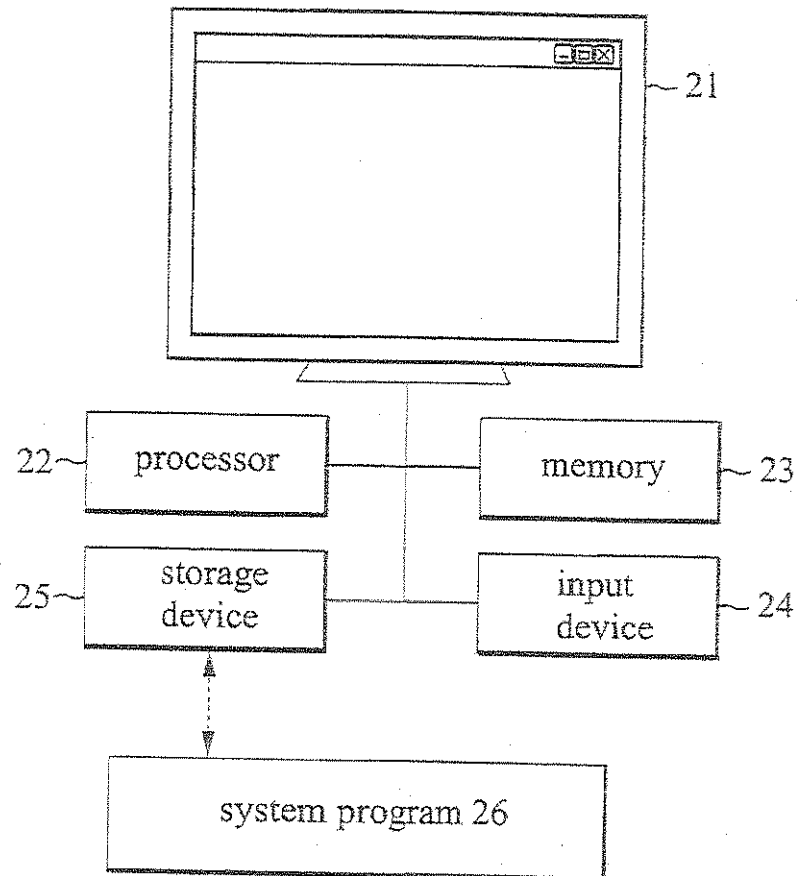


FIG.2

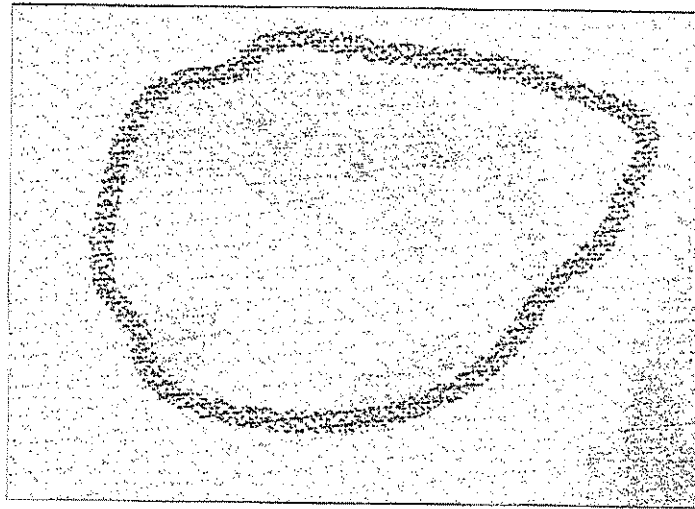


FIG.3A

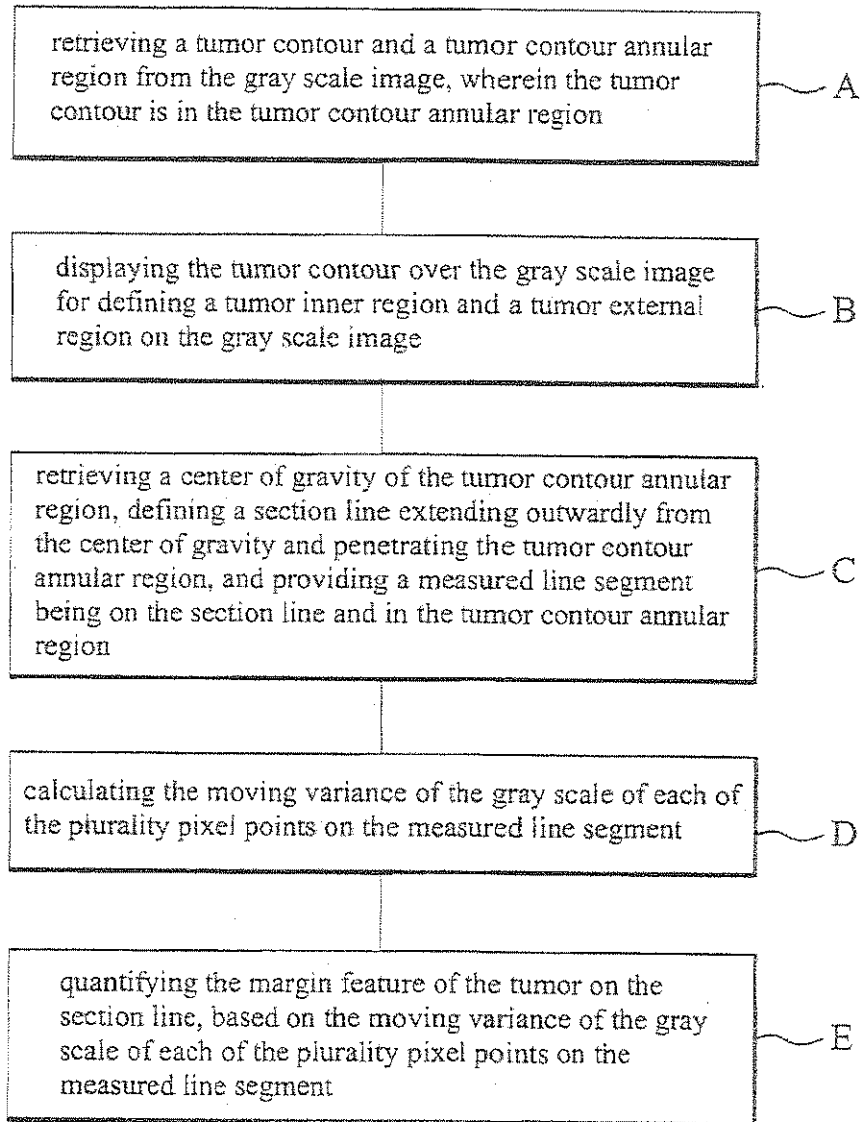


FIG.3B

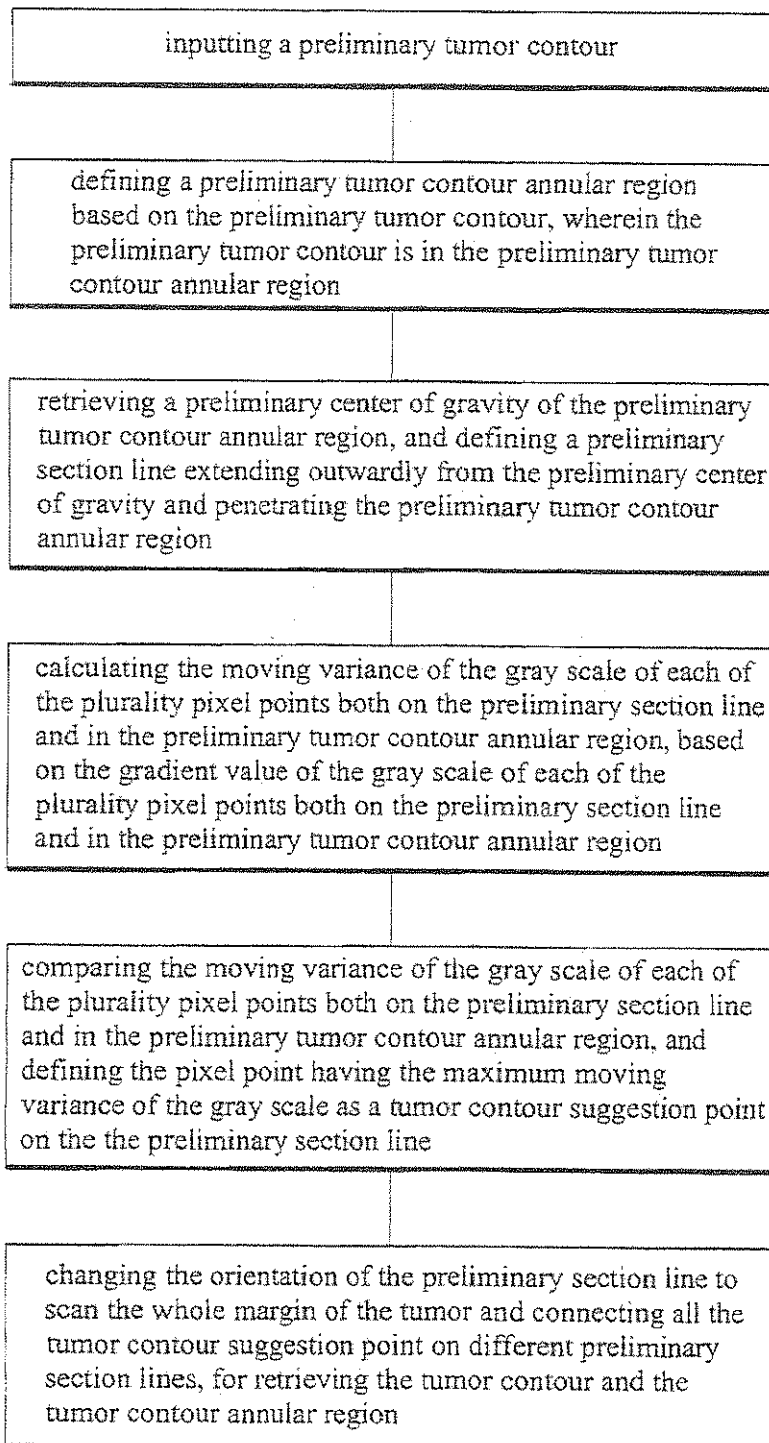


FIG.3C

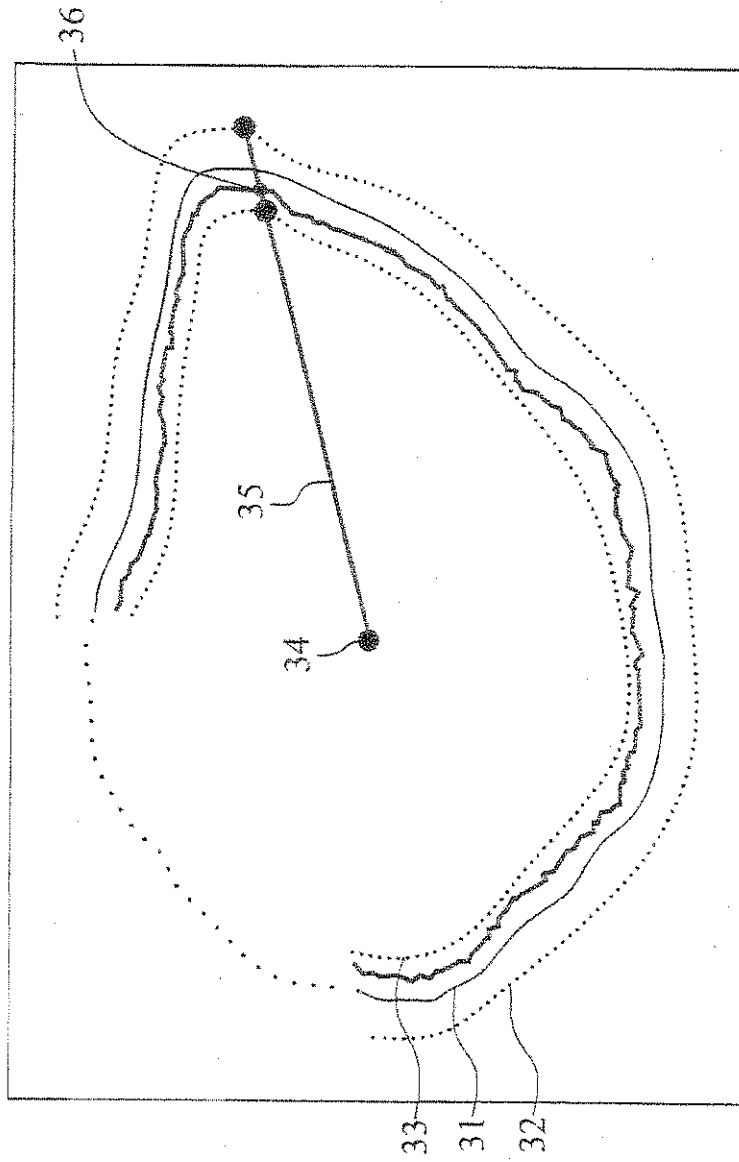


FIG. 3D

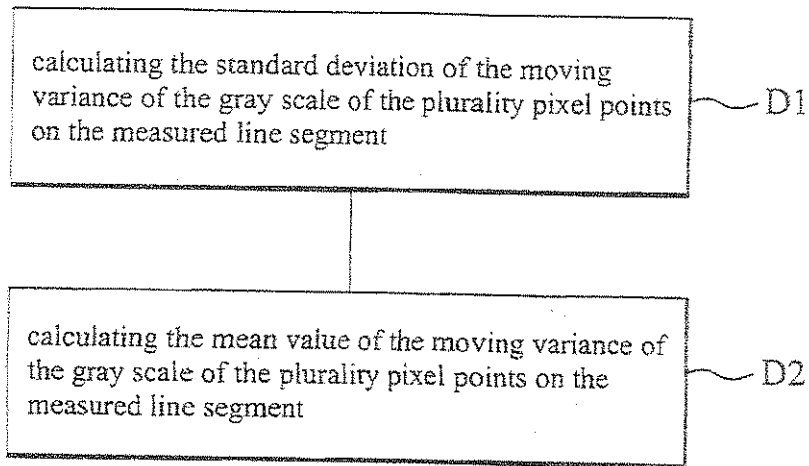


FIG.3E

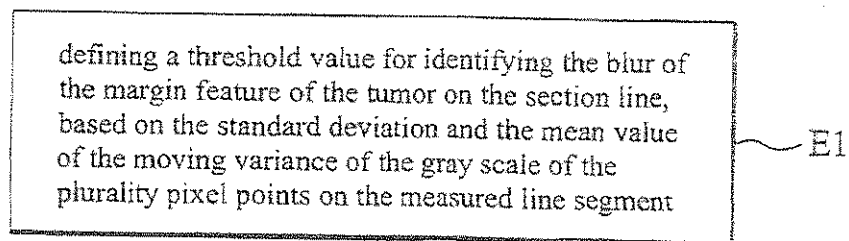


FIG.3F

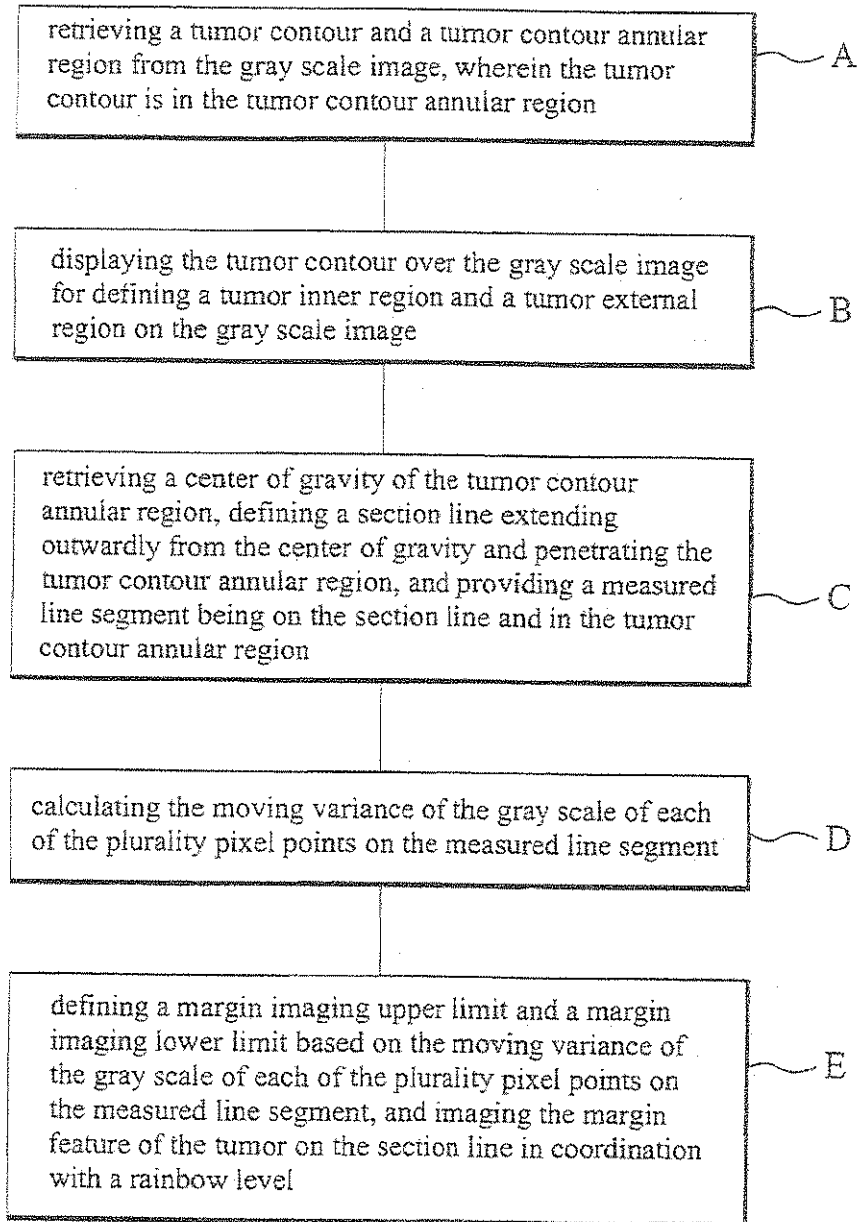


FIG.4A

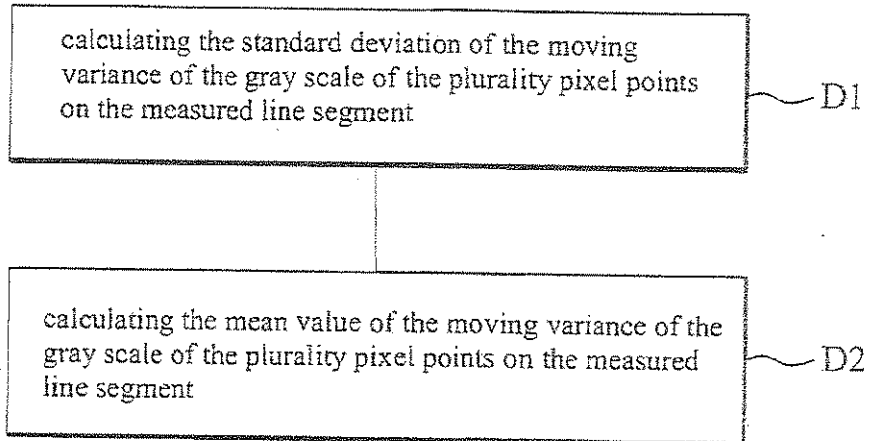


FIG.4B

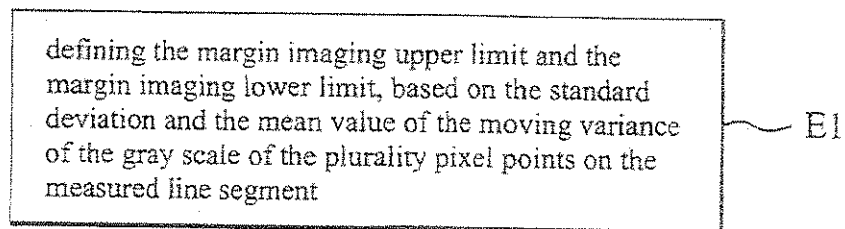


FIG.4C

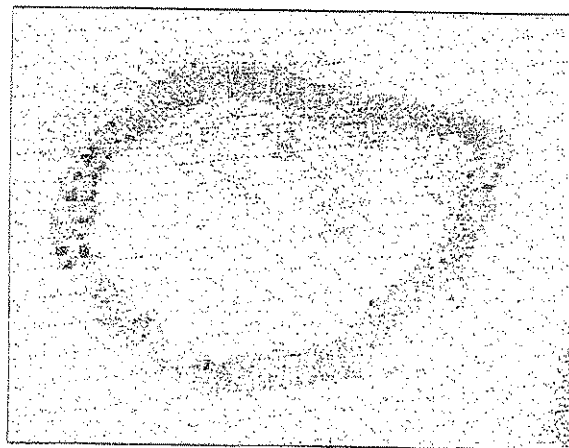


FIG.5

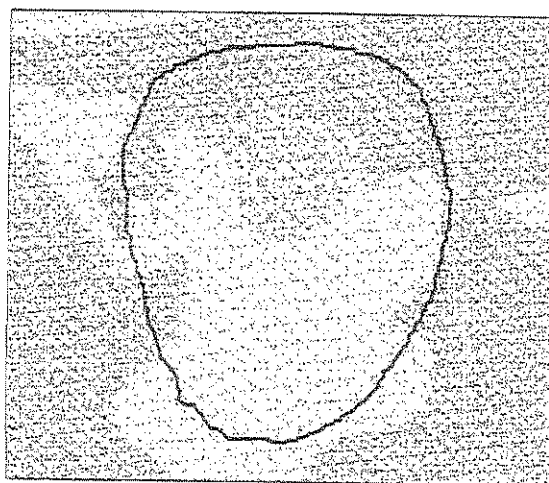


FIG.6A

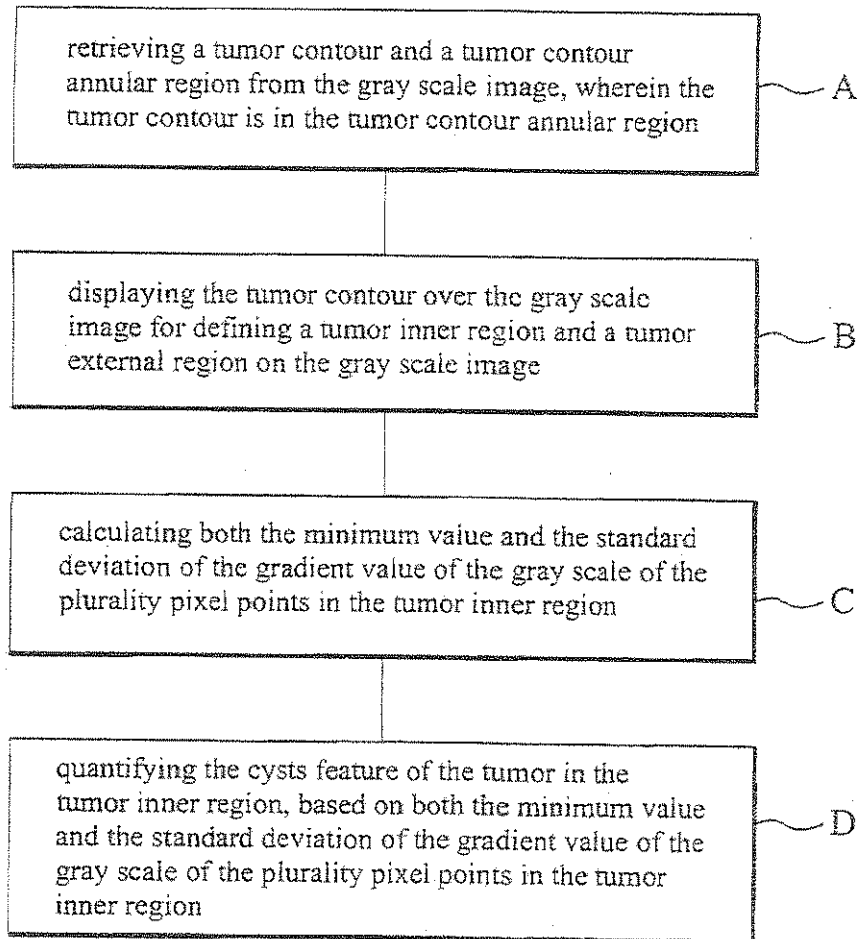


FIG.6B

defining a threshold value for calculating the ratio of the region having the cysts feature over the tumor inner region, based on both the minimum value and the standard deviation of the gradient value of the gray scale of the plurality pixel points in the tumor inner region

D1

FIG.6C

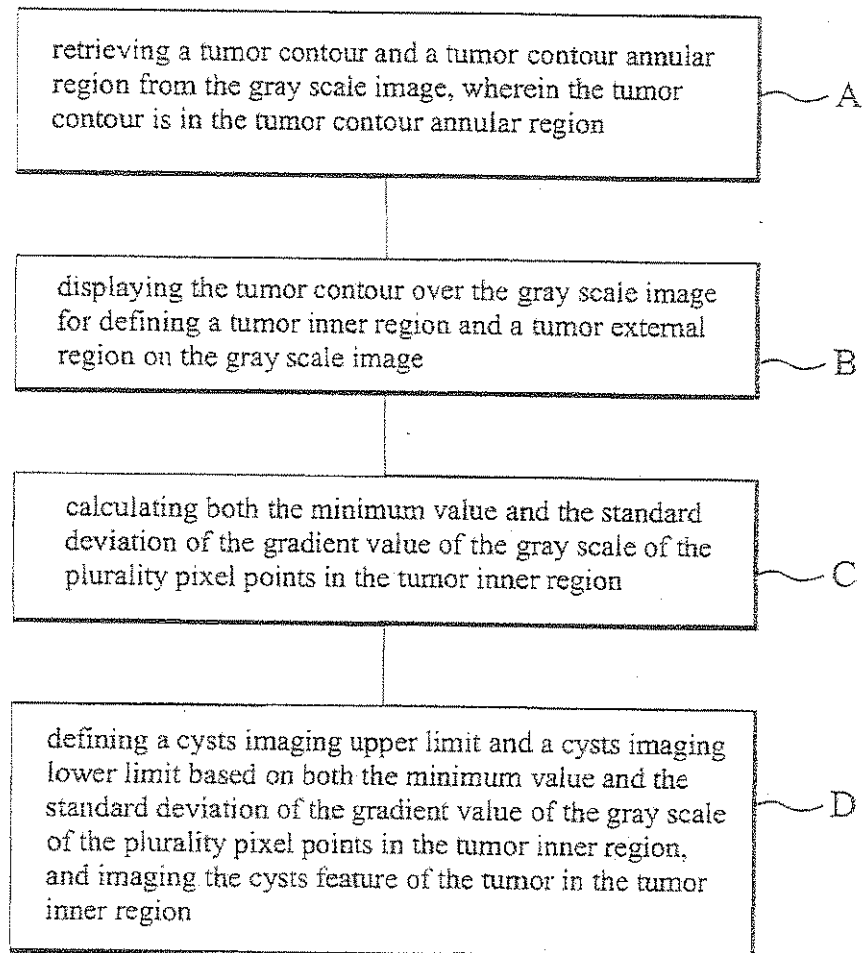


FIG.7A

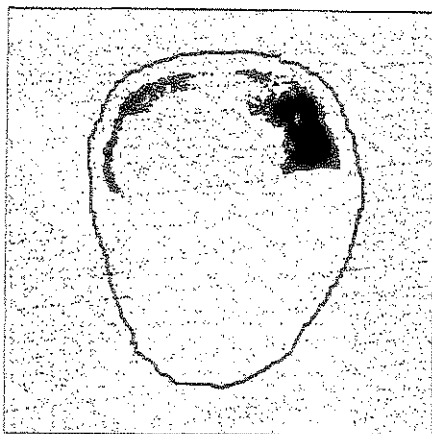


FIG. 7B

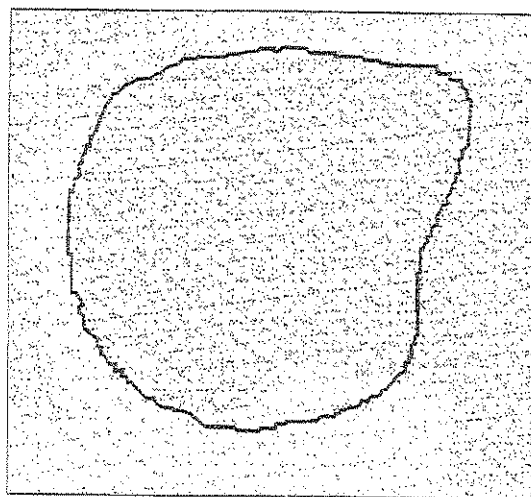


FIG. 8A

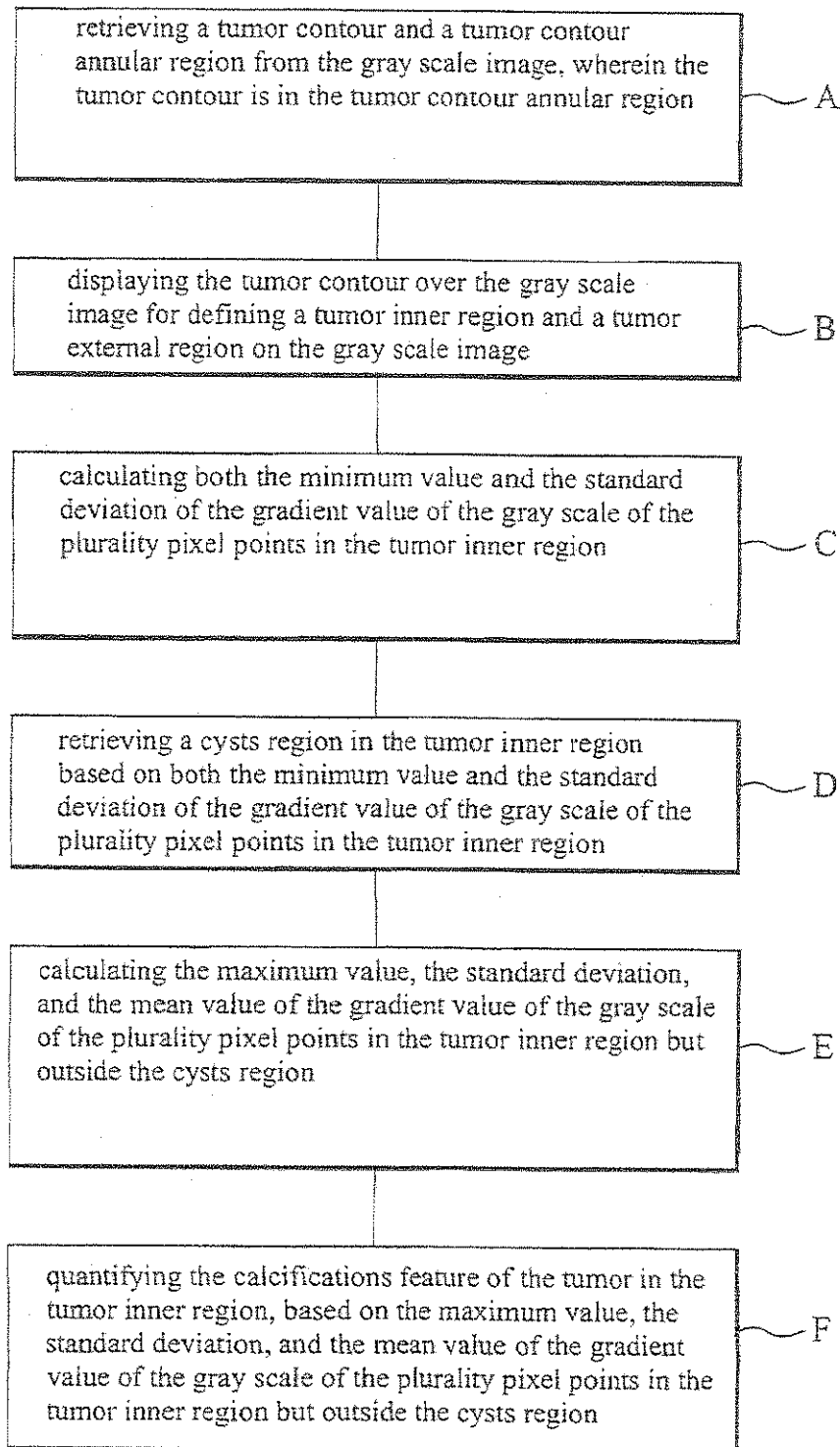


FIG. 8B

defining a threshold value for calculating the ratio of the region having the calcifications feature over the tumor inner region, based on the maximum value, the standard deviation, and the mean value of the gradient value of the gray scale of the plurality pixel points in the tumor inner region but outside the cysts region

F1

FIG.8C

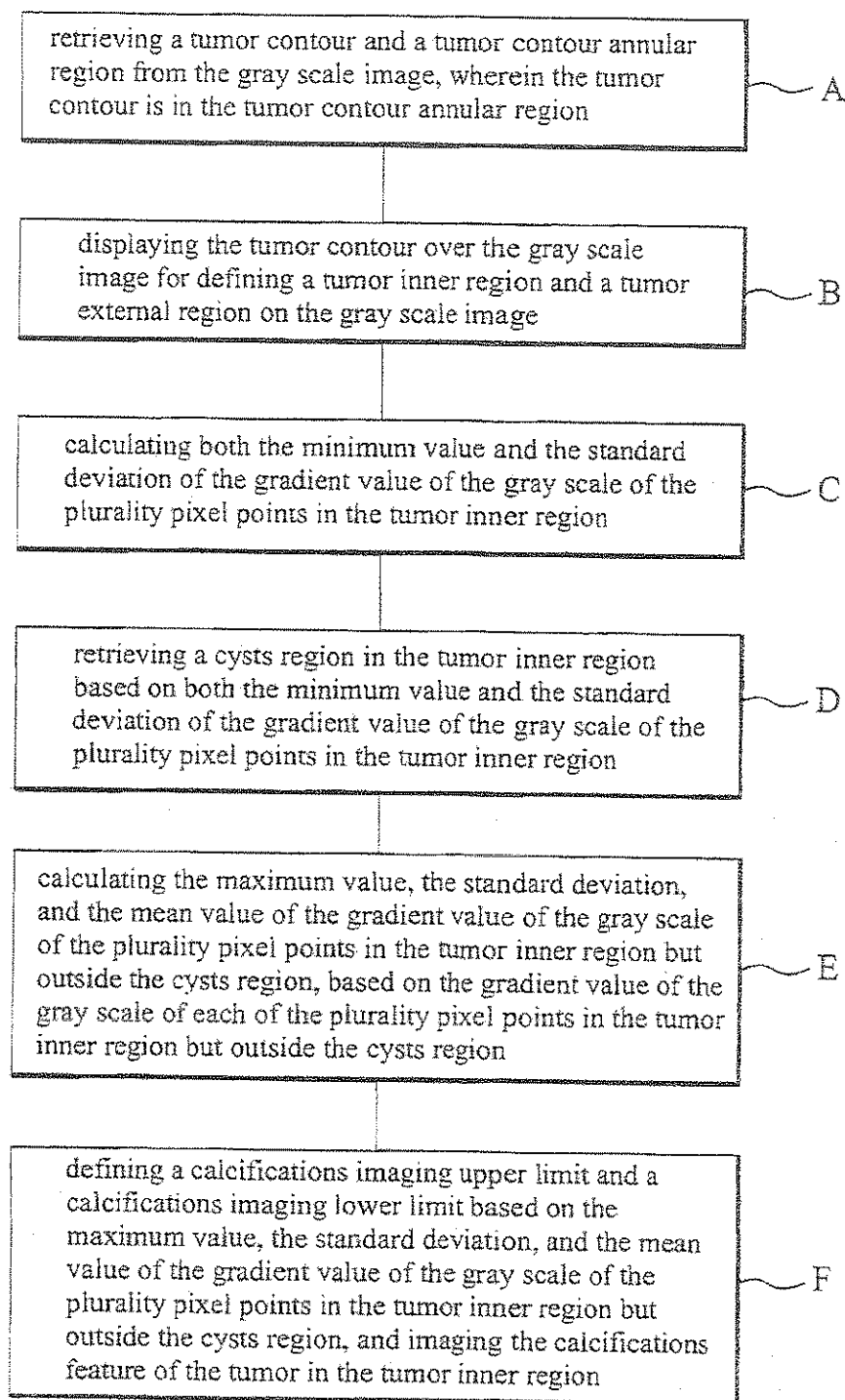


FIG.9A

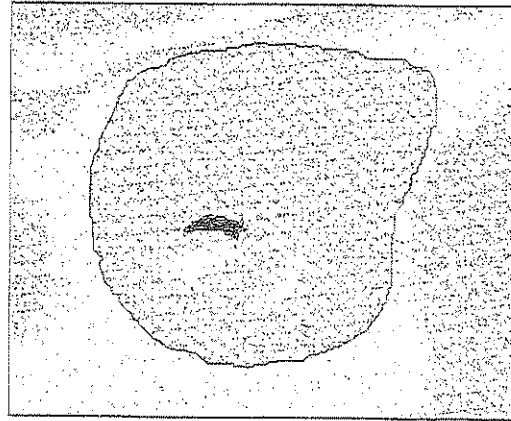


FIG. 9B

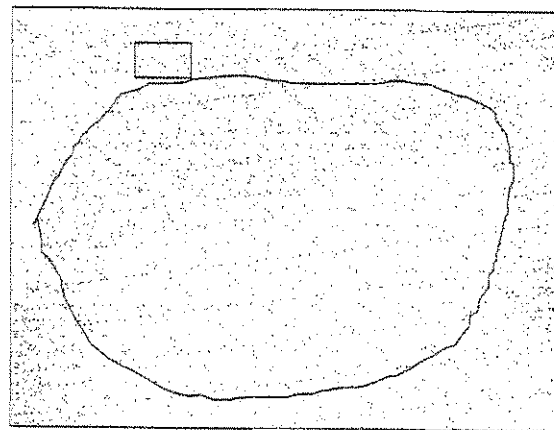


FIG. 10A

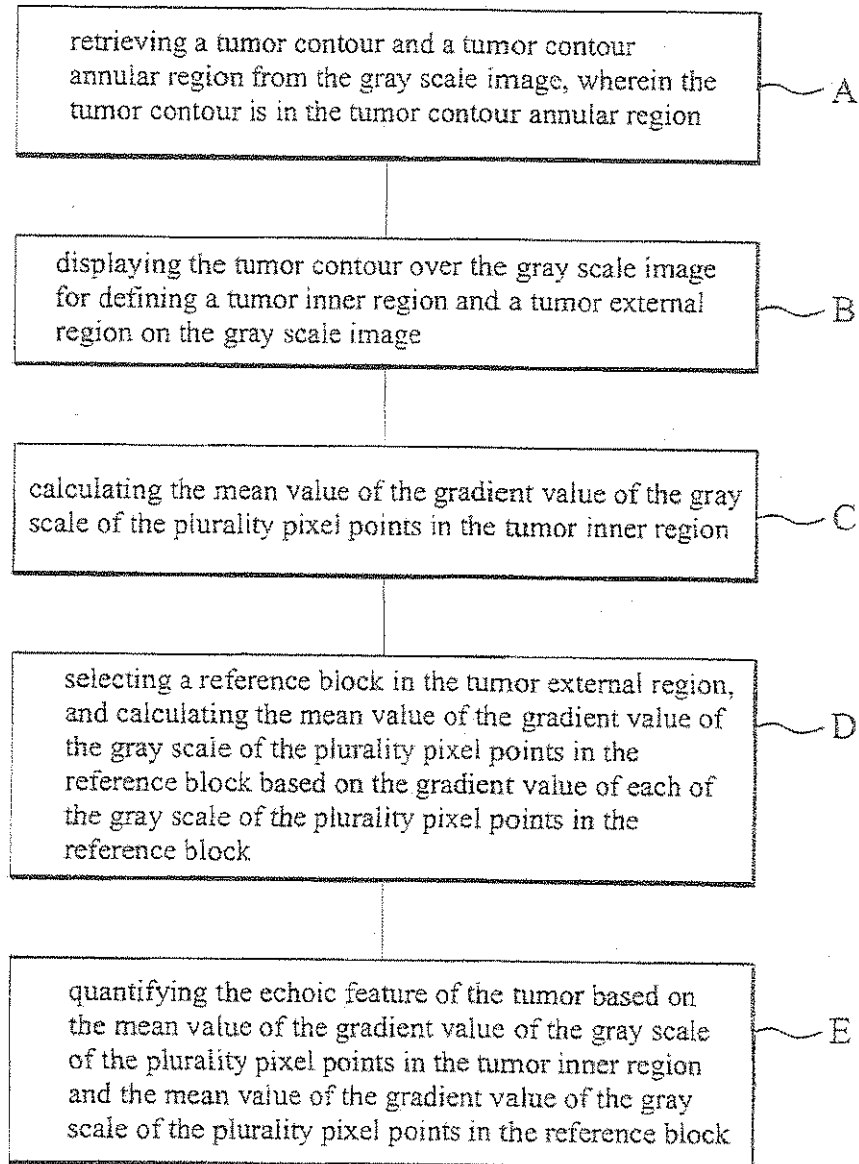


FIG.10B

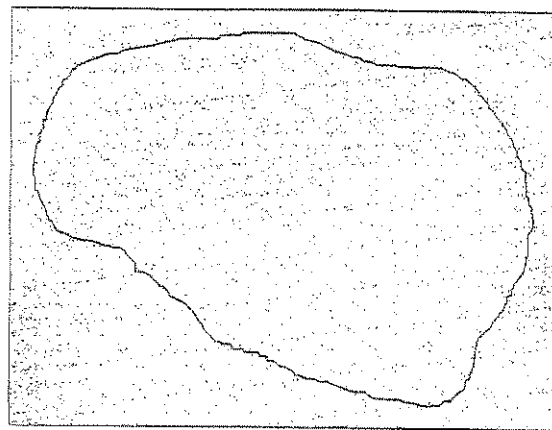


FIG.11A

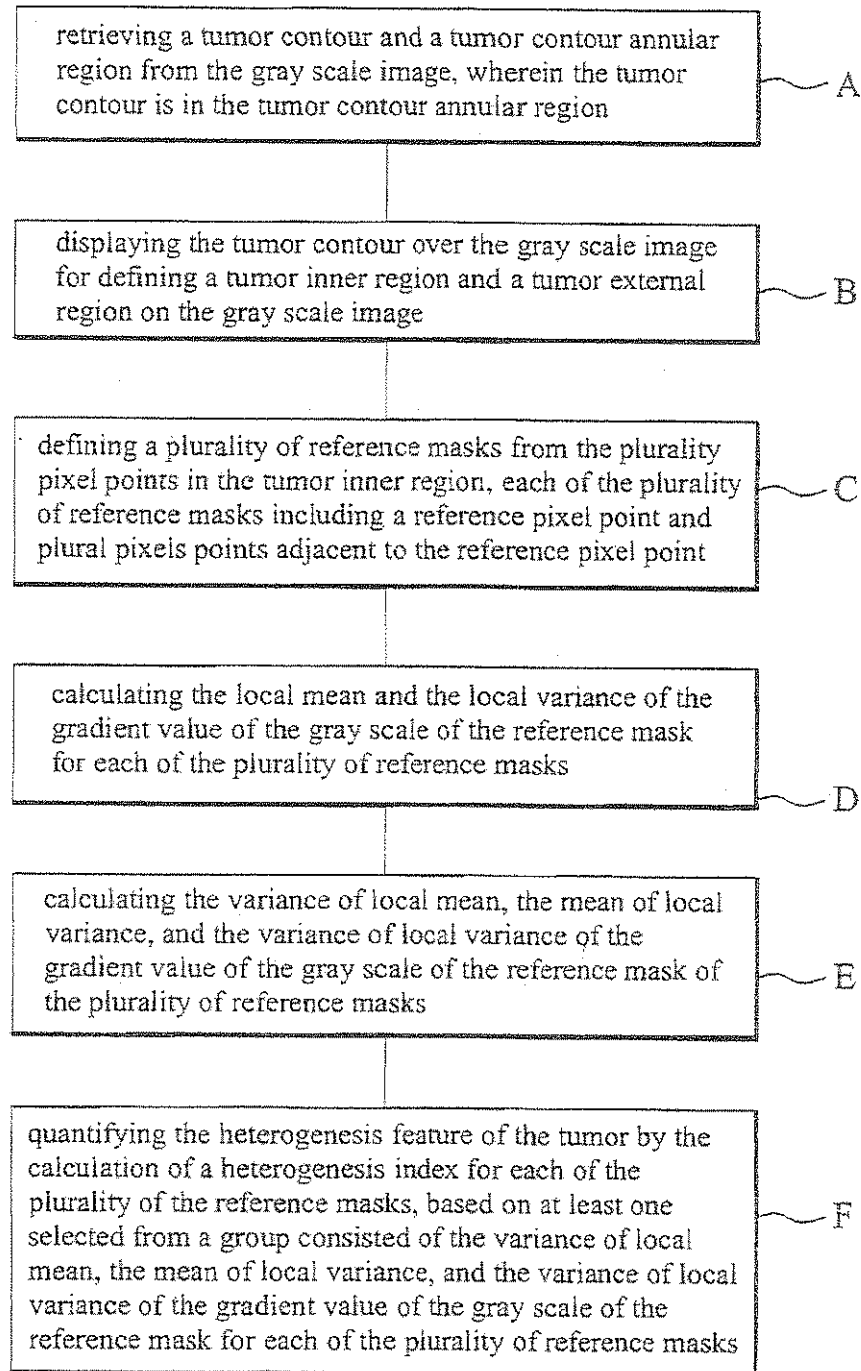


FIG.11B

defining a threshold value for calculating the ratio of the region having the heterogenesis feature over the tumor inner region, based on the heterogenesis index for each of the plurality of the reference masks

F1

FIG.11C

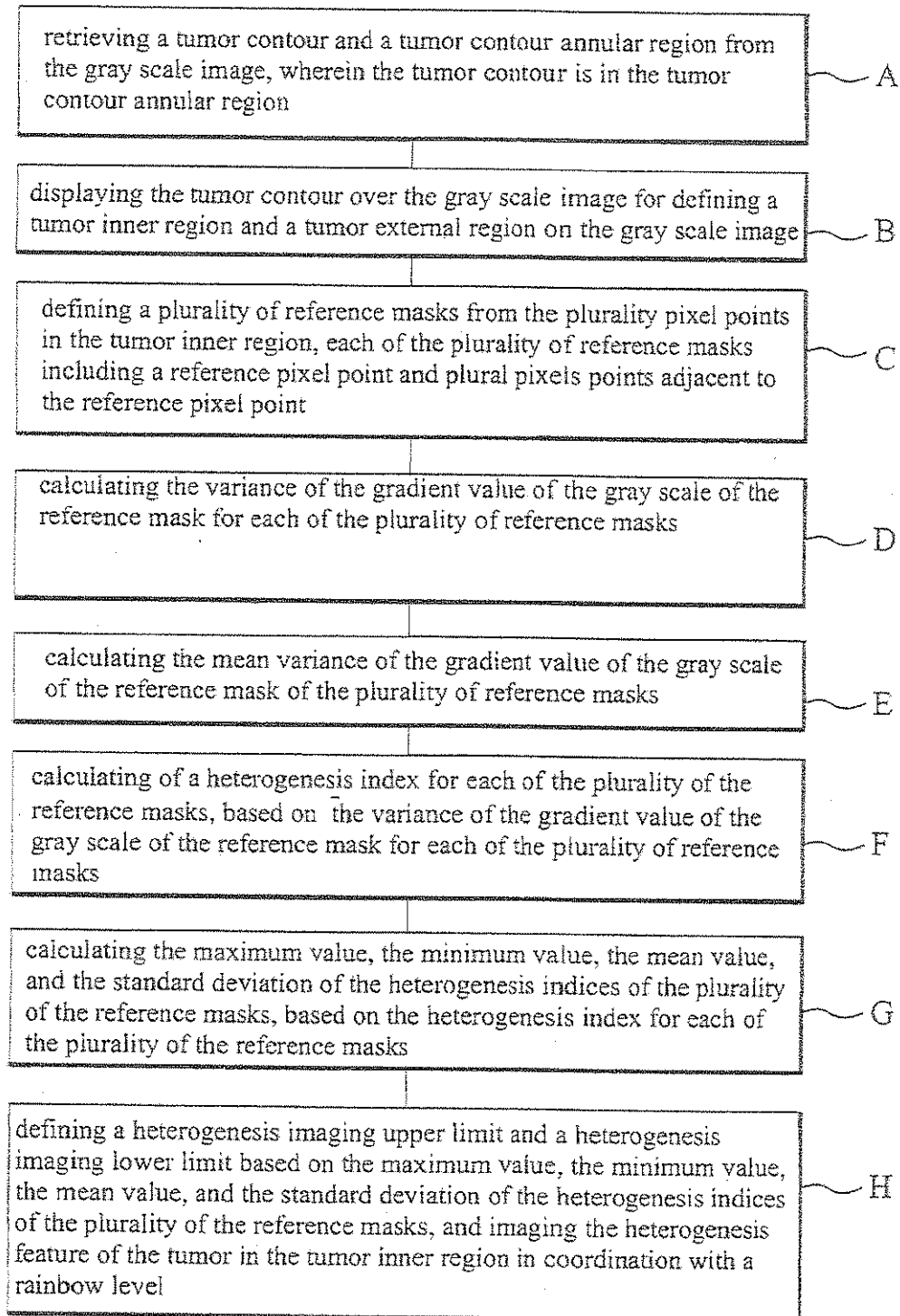


FIG.12A

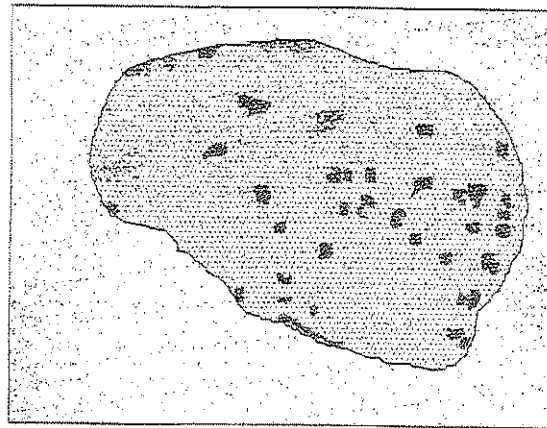


FIG.12B