

Handbook of
Image and Video Processing, Second Edition

图像与视频 处理手册 (下册)

(第二版) (英文版)

[美] Alan Bovik 编著



电子工业出版社

Publishing House of Electronics Industry

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内 容 简 介

本书介绍了图像和视频处理方面的基本原理、主要技术和典型应用,相关的内容包括图像与视频的增强和恢复,分类和分割,图像边缘检测,图像处理算法,图像压缩、存储、重取和通信,以及图像处理的应用。全书按内容聘请有关专家编写,涉及范围广、内容新、质量高,反映了最新的研究成果。本书的下册主要针对图像压缩、视频压缩、图像与视频获取、图像与视频的存取和通信、图像处理的应用等内容进行了深入的介绍。

本书可作为学习图像和视频处理课程的本科生、研究生的教材与参考用书,并且对于从事图像和视频方面研究的人员也是一本很好的参考材料。

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Alan Bovik

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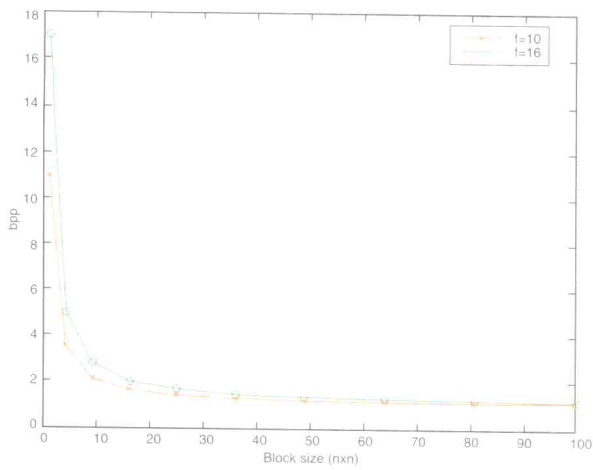


Figure 5.2.4



Figure 5.2.6

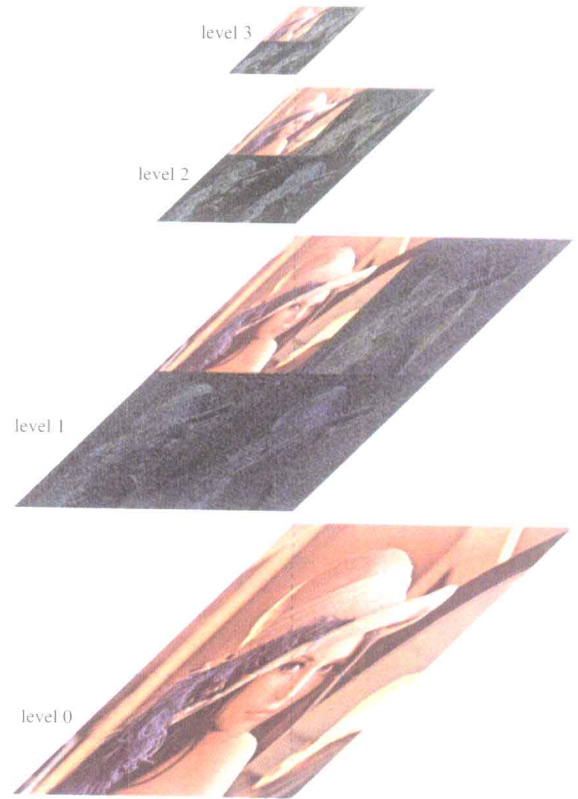


Figure 5.4.1



Figure 5.5.13



Figure 5.4.2

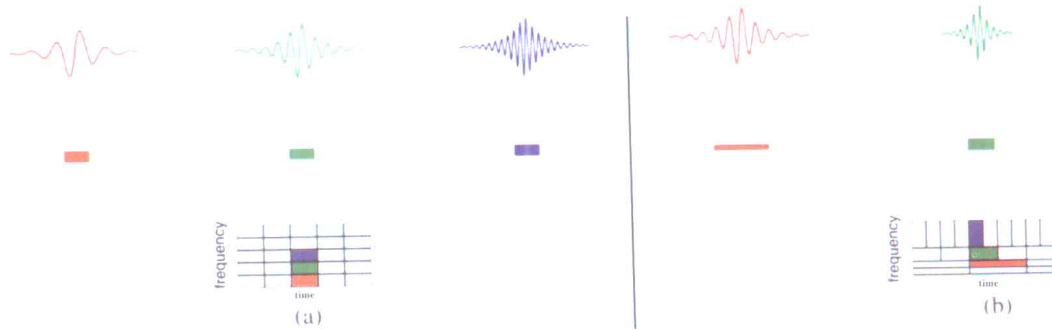


Figure 5.4.3

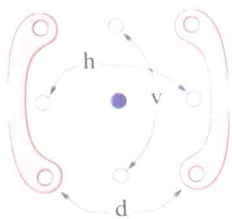


Figure 5.5.17



Figure 6.5.17



Figure 6.2.20



Figure 6.2.21

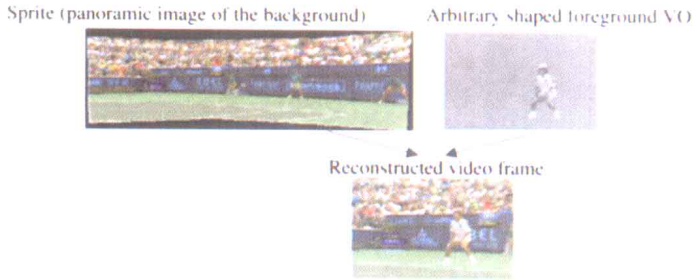


Figure 6.5.7



Figure 6.6.1

Figure 7.1.1



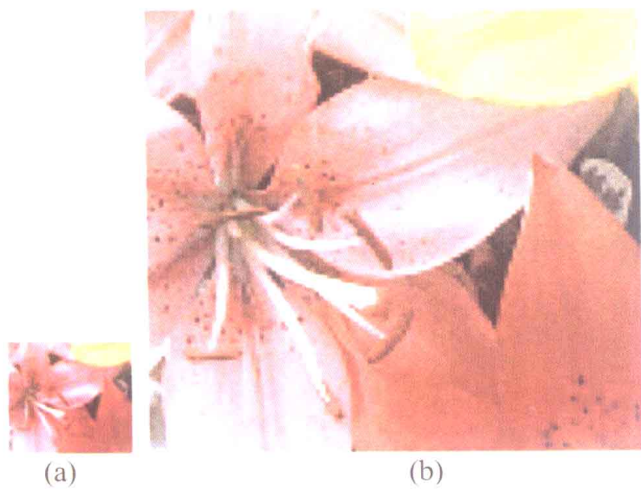


Figure 7.1.11



Figure 7.1.13



Figure 7.1.19



Figure 7.1.23



Figure 9.1.2

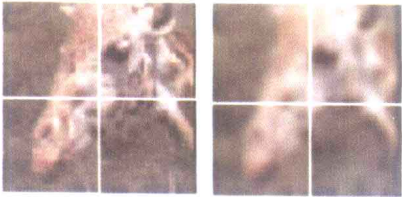


Figure 9.1.1



Figure 9.1.3

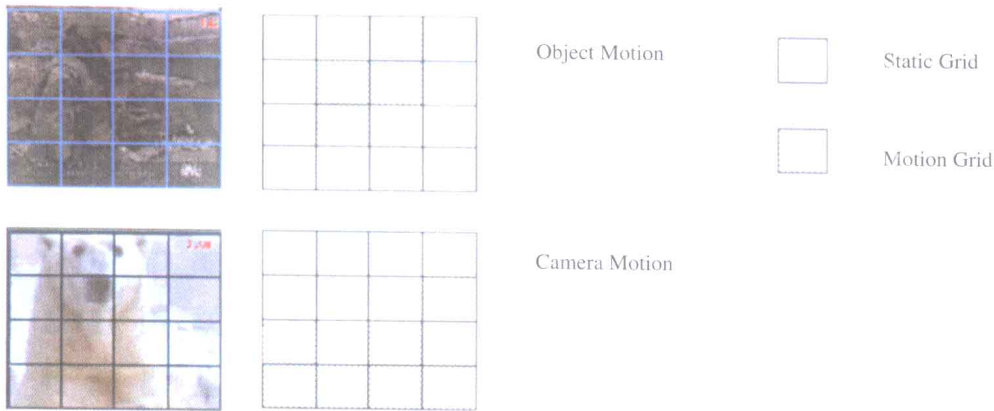


Figure 9.1.4



Figure 9.1.5

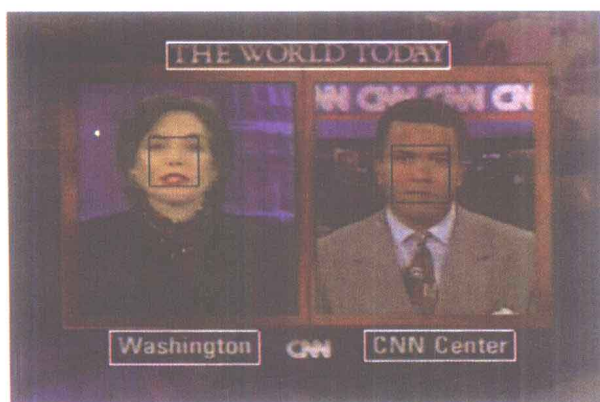
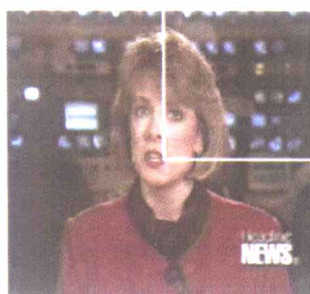


Figure 9.1.6



Frame t



Frame $t+T$

Figure 9.1.8

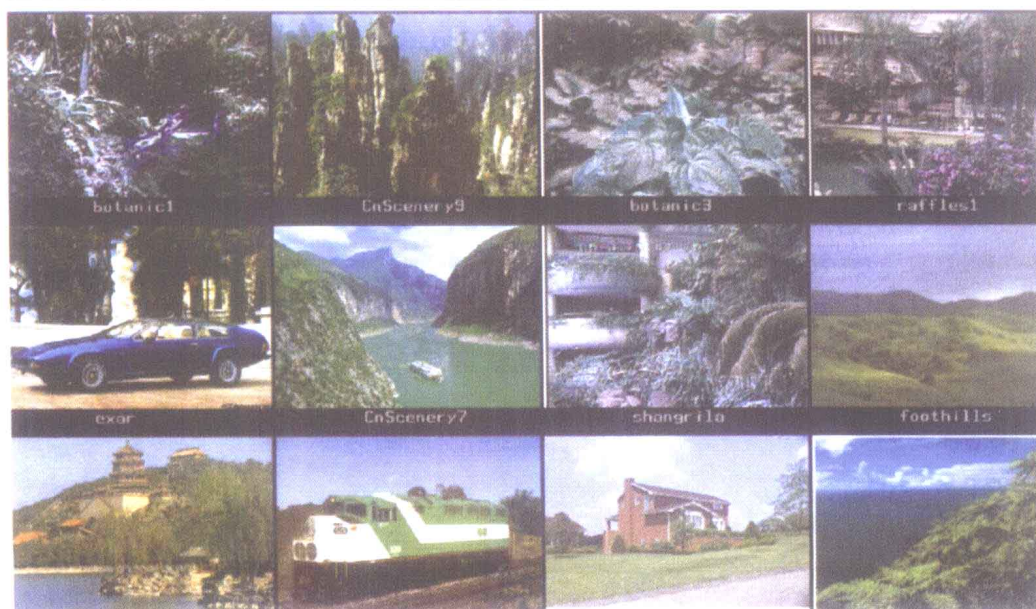


Figure 9.1.9



Figure 9.1.10

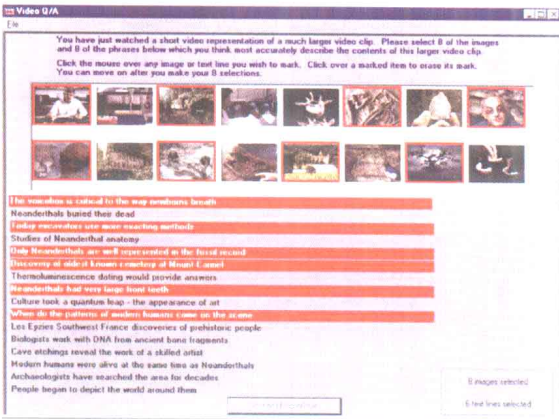


Figure 9.1.11

Original Video (1100 frames)



Skim Video (78 frames)



Figure 9.1.12

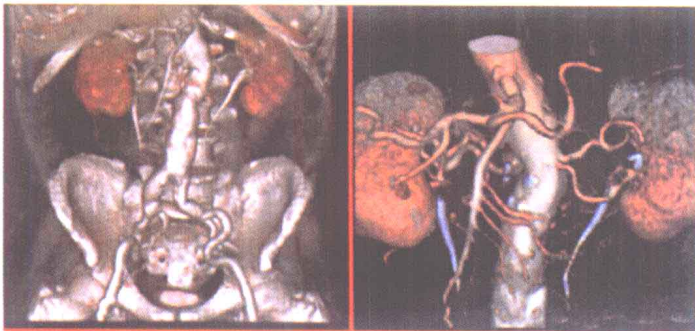


Figure 10.2.5

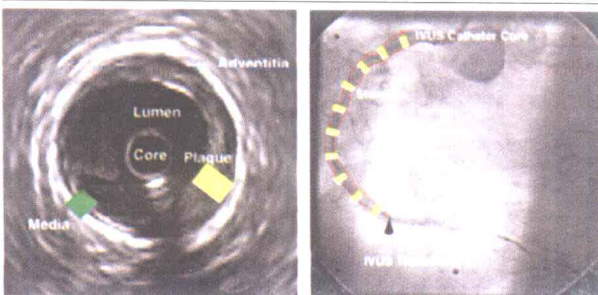


Figure 10.3.8

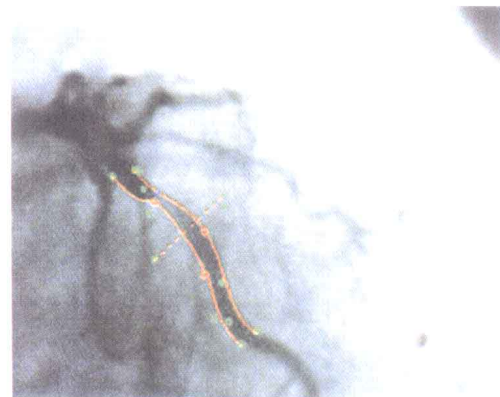


Figure 10.3.3



Figure 10.3.6

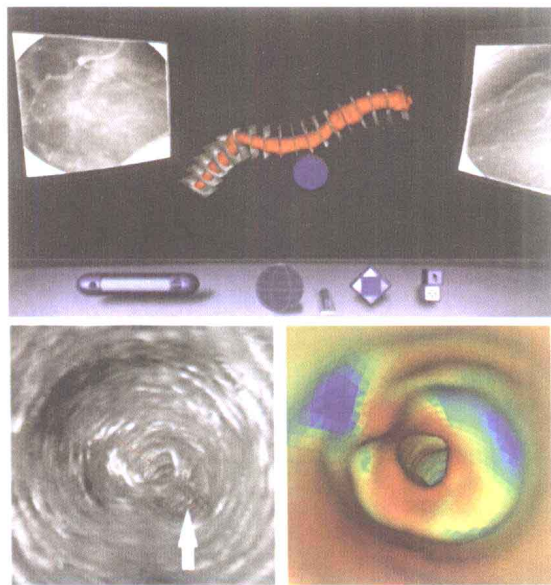


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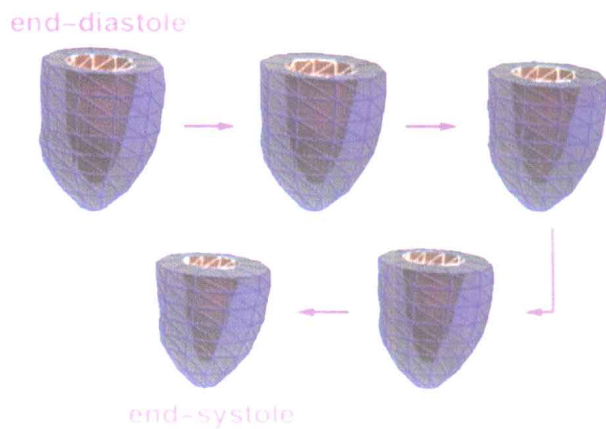


Figure 10.3.16

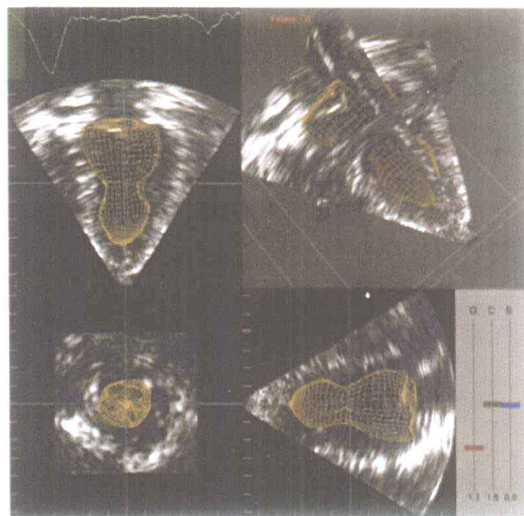


Figure 10.3.14



Figure 10.3.17

Figure 1 consists of four panels labeled (a) through (d). Panel (a) shows a grayscale face image with 68 small white dots representing facial landmarks. Panel (b) shows a grayscale lip image with a dashed line representing the lip contour. Panel (c) shows three vertically stacked grayscale lip images, each with a different expression. Panel (d) shows a grayscale face image with a white bounding box around the face.

Figure 10.8.5



Figure 10.8.9

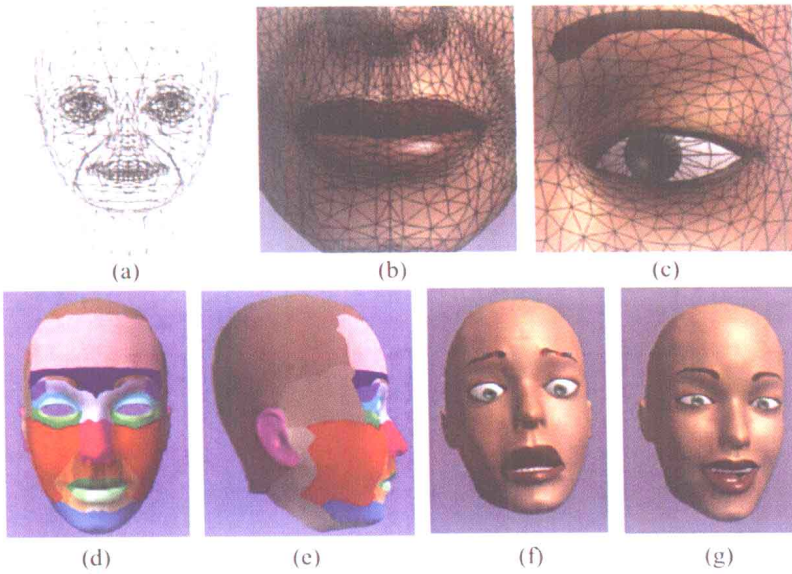


Figure 10.8.11

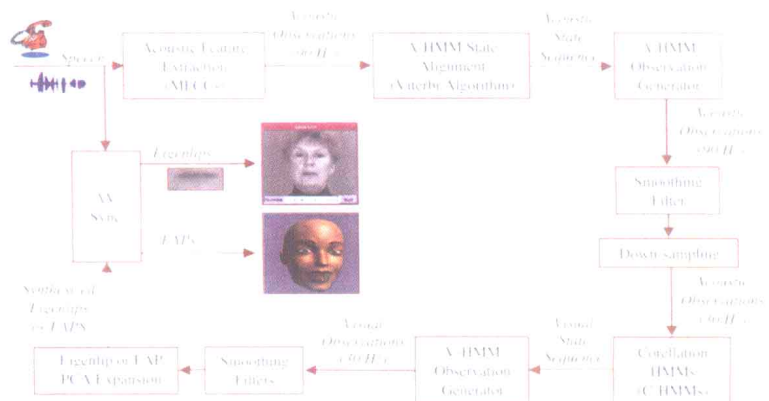


Figure 10.8.13

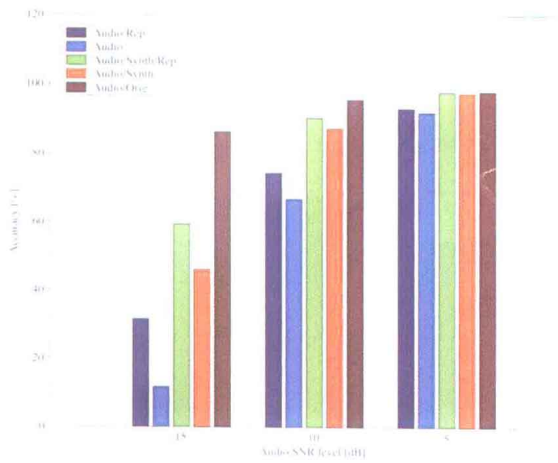


Figure 10.8.14

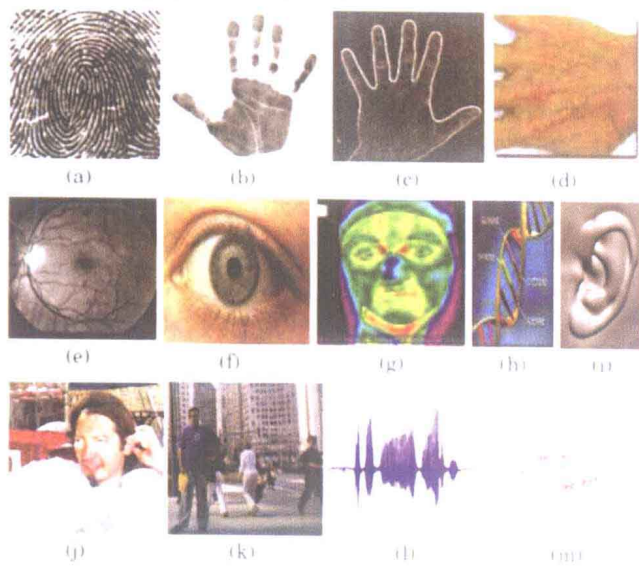


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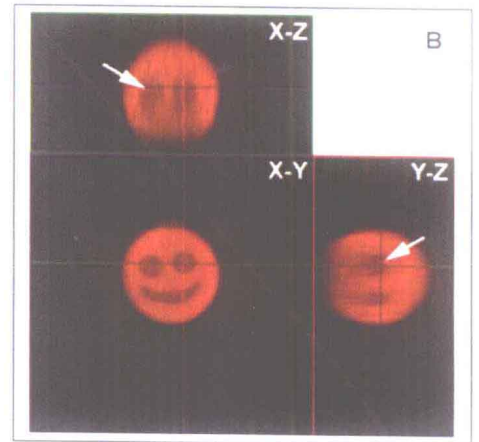
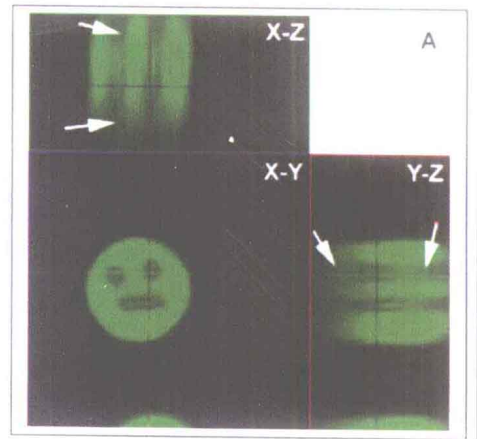


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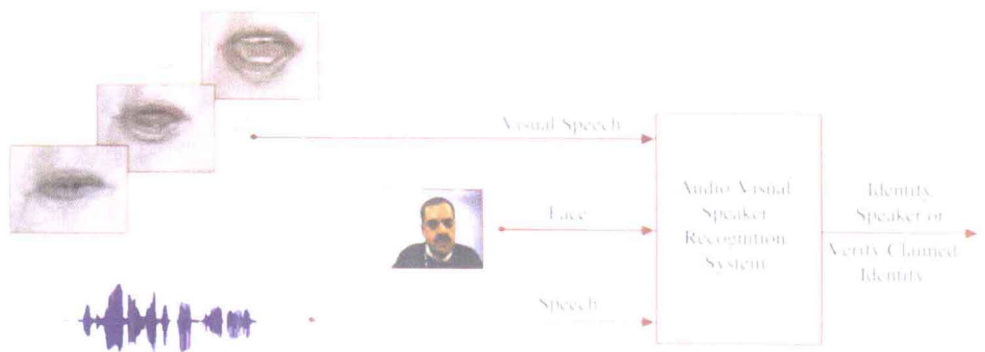


Figure 10.8.16

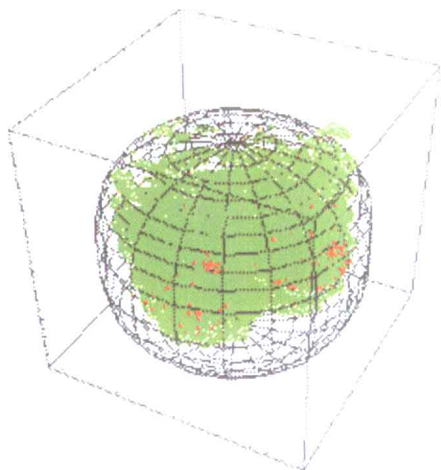


Figure 10.9.9

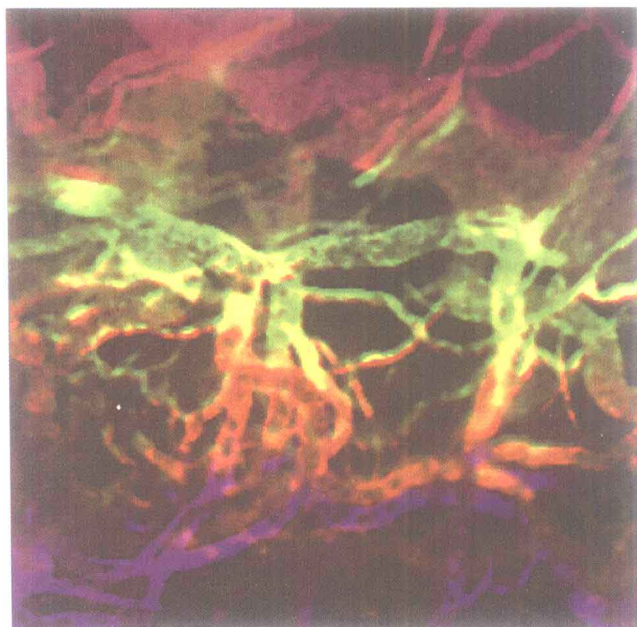


Figure 10.9.12

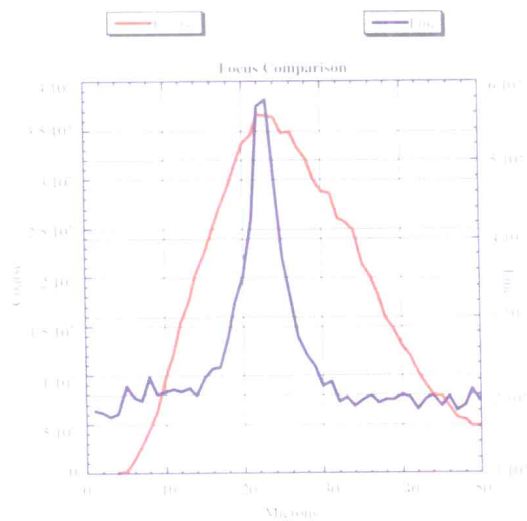


Figure 10.10.2

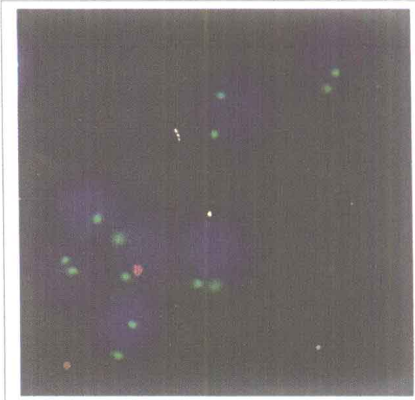
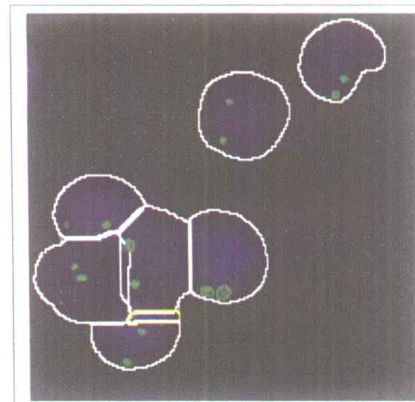


Figure 10.10.6

Figure 10.10.4

Scan Section Selection:

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24

Section Number: 0

Frame Count: 0 of 15252 ☐ Save All Images

Metaphases Found: 0

X Axis Factor: 0.95

Y Axis Factor: 0.95

Case Name:

Go To Next Section After Finding Metaphases



Figure 10.10.8

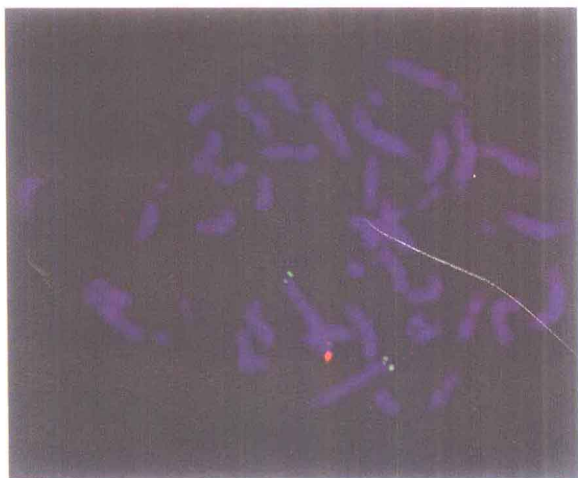


Figure 10.10.9

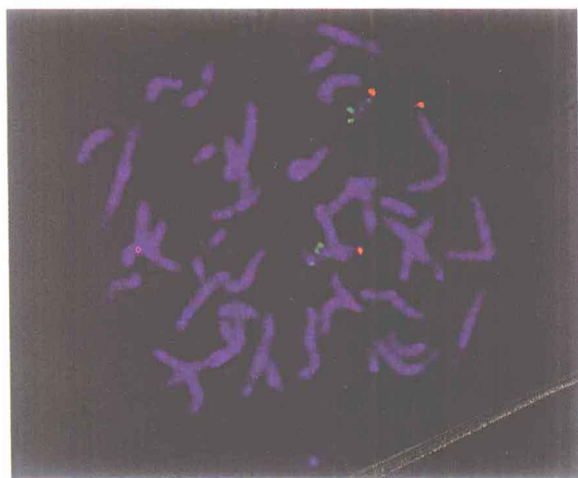


Figure 10.10.10

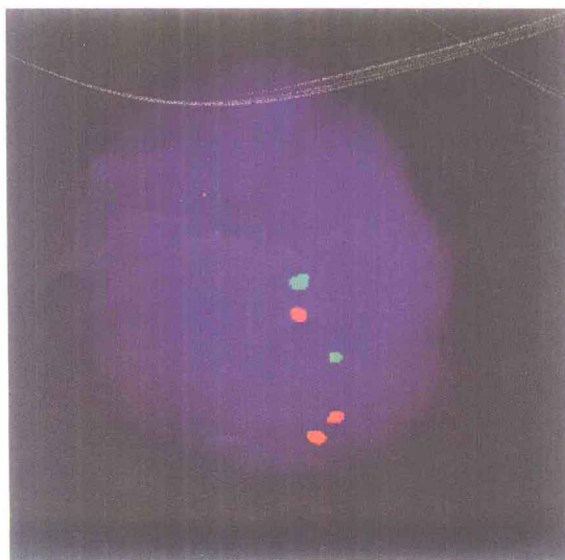


Figure 10.10.15

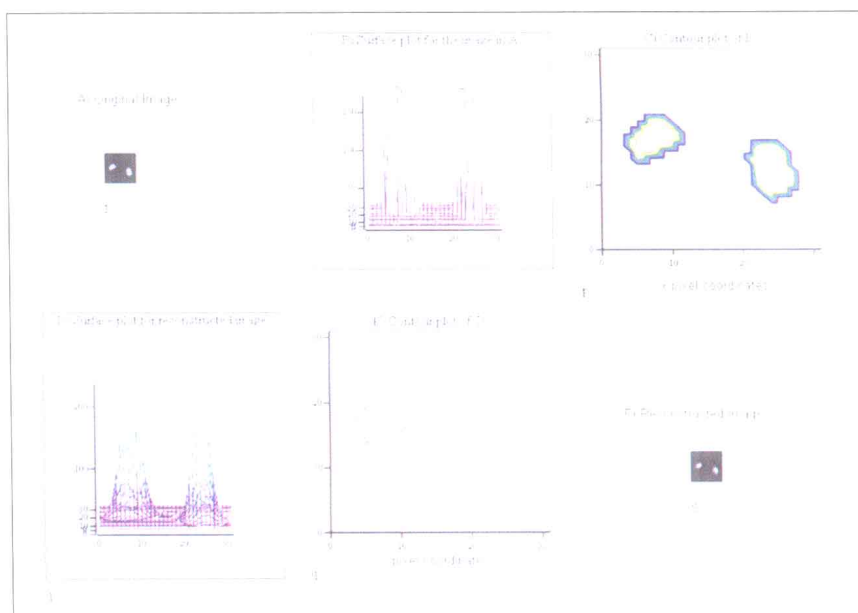


Figure 10.10.11

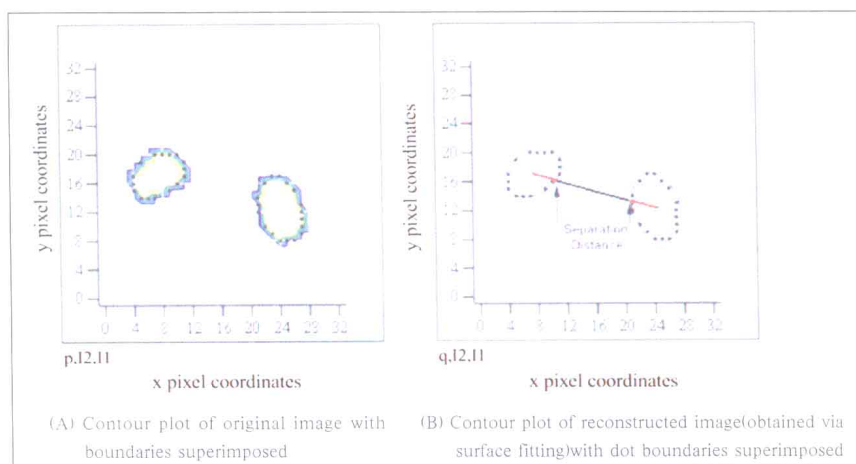


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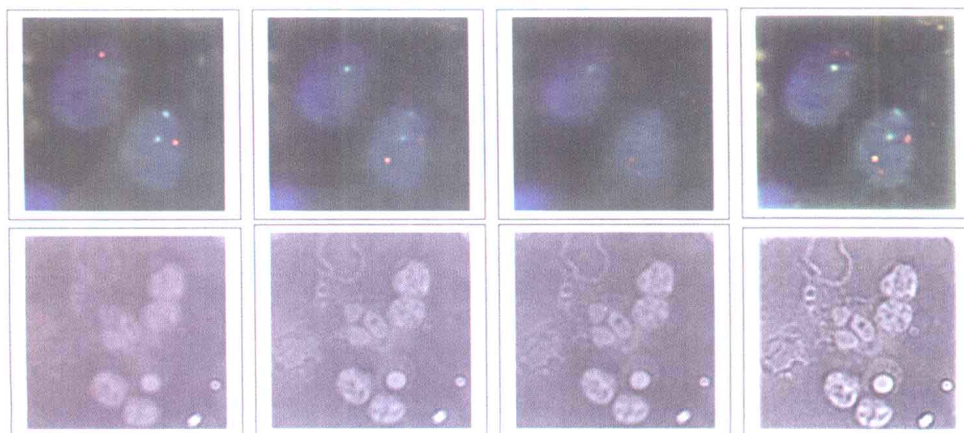


Figure 10.10.17