

Fig. 7.12. A Wavelet Tour of Signal Processing,  $3^{rd}$  ed. (a): A fast wavelet transform is computed with a cascade of filterings with  $\bar{h}$  and  $\bar{g}$  followed by a factor 2 subsampling. (b): A fast inverse wavelet transform reconstructs progressively each  $a_j$  by inserting zeroes between samples of  $a_{j+1}$  and  $d_{j+1}$ , filtering and adding the output.