Algorithm OLA_Filtering

Input: $x_m[n]$, for $m=0,1,2\cdots$
for $n=0,1,2,\cdots,P-1$

$h[k]$, for $k=0,1,2,\cdots Q-1$

Intermediate variable: $g(n)$, for $n=0,1,2\cdots N-1$

$r[n)$, for $n=0,1,2\cdots N-1$

Output: $y_m(n)$, for $m=0,1,2\cdots$
for $n=0,1,2,\cdots P-1$

0) Initialization: $m=0$ // frame index

$r[n]=0$, for $n=0,1,\cdots N-1$
// buffer for the old inference

1) new inference: $g(n)=x_m[n]*h(n)$
for $n=0,1,\cdots N-1$

2) overlap-add: $g[n]=g(n)+r[n+p]$
for $n=0,1,\cdots,N-P-1$

3) Output: $y_m[n)=g[n)$, for $n=0,1,2\cdots P-1$

4) Swap buffer: $r[n]=g[n)$, for $n=0,1,2,\cdots N-1$

5) frame shift: if $x_{m+1}(n)$ exists,

$m=m+1$ and go to 1),

or go to 6)

6) End