

Title (en)  
Pitch lag estimation system

Title (de)  
System zur Schätzung der Grundfrequenz

Title (fr)  
Système d'estimation de la fréquence fondamentale

Publication  
**EP 0713208 A2 19960522 (EN)**

Application  
**EP 95118142 A 19951117**

Priority  
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Abstract (en)  
A pitch estimation device and method utilizing a multi-resolution approach to estimate speech pitch lag. The system includes sampling the speech 602 and applying, alternately, a discrete Fourier transform 606 and squaring the result 608. A DFT on the squared amplitude is then performed 610 to transform the speech samples into another domain. An initial pitch lag can then be found with lower resolution. After getting the low-resolution pitch lag estimate, a refined algorithm is applied 618 to get a higher-resolution pitch lag. The refined algorithm is based on minimizing the prediction error in the time domain. The refined pitch lag then can be used directly in the speech coding. <IMAGE>

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**G10L 3/00**

IPC 8 full level  
**G10L 19/02** (2013.01); **G10L 19/038** (2013.01); **G10L 19/04** (2013.01); **G10L 19/09** (2013.01); **G10L 19/16** (2013.01); **G10L 21/003** (2013.01); **G10L 21/04** (2013.01); **G10L 25/90** (2013.01)

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