

Title (en)  
METHOD AND APPARATUS FOR TRANSCUTANEOUS CARDIAC PACING.

Title (de)  
VERFAHREN UND GERÄT ZUR TRANSKUTANEN HERZREIZUNG.

Title (fr)  
PROCEDE ET APPAREIL DE STIMULATION CARDIAQUE TRANSCUTANEE.

Publication  
**EP 0594620 A4 19941102 (EN)**

Application  
**EP 91915140 A 19910715**

Priority  
US 9104972 W 19910715

Abstract (en)  
[origin: WO9301861A1] Method and apparatus for transcutaneously pacing the heart with pacing stimuli each of which comprises a series of individual pulses. The heart reacts to the series of pulses as if the series were one continuous pulse, whereas the pulse series produces skeletal muscle reactions that are similar to that which would be expected for individual pulses. The result is reduced stimulation of skeletal muscles and nerves, and less discomfort for the patient. Further reduction in stimulation of skeletal muscles and nerves can be achieved by providing a series of subthreshold initial pulses in each pacing stimulus, and by providing background stimuli occurring in the intervals between pacing stimuli. The apparatus includes timing and control circuitry (20), stimuli generating circuitry (30) connected to electrodes (70, 72).

IPC 1-7  
**A61N 1/36**

IPC 8 full level  
**A61N 1/36** (2006.01); **A61N 1/362** (2006.01)

CPC (source: EP)  
**A61N 1/3625** (2013.01)

Citation (search report)

- [A] EP 0372698 A1 19900613 - INTERMEDICS INC [US]
- See references of WO 9301861A1

Designated contracting state (EPC)  
FR GB

DOCDB simple family (publication)  
**WO 9301861 A1 19930204**; EP 0594620 A1 19940504; EP 0594620 A4 19941102

DOCDB simple family (application)  
**US 9104972 W 19910715**; EP 91915140 A 19910715