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(54) Title (EN): DYNAMIC BOWTIE FILTER AND METHODS OF USING THE SAME

(54) Title (FR): FILTRE EN NŒUD PAPILLON DYNAMIQUE ET PROCÉDÉS D'UTILISATION DE CELUI-CI

(57) Abstract:

(EN): An imaging system (100) includes a radiation source (708) that emits radiation that traverses an examination region (706), a radiation detector array (716) with a plurality of detectors (1104N) that detect the radiation that traverses the examination region, a dynamic bowtie filter (718) between the radiation source and the examination region, a first motor (7221) and a second motor (7222), and a controller (724). The dynamic bowtie filter includes a first half wedge (7181) and a second half wedge (7182). The first motor is in mechanical communication with the first half wedge and moves the first half wedge and the second motor is in mechanical communication with the second half wedge and moves the second half wedge. The controller independently controls the first and second motors to move the first and second half wedges.

(FR): La présente invention concerne un système d'imagerie (100) comprenant une source de rayonnement (708) qui émet un rayonnement qui traverse une région d'examen (706), un ensemble de détecteurs de rayonnement (716) avec une pluralité de détecteurs (1104N) qui détectent le rayonnement qui traverse la région d'examen, un filtre en nœud papillon dynamique (718) entre la source de rayonnement et la région d'examen, un premier moteur (7221) et un second moteur (7222), et un dispositif de commande (724). Le filtre en nœud papillon dynamique comprend un premier demi-coin (7181) et un second demi-coin (7182). Le premier moteur est en communication mécanique avec le premier demi-coin et déplace le premier demi-coin, et le second moteur est en communication mécanique avec le second demi-coin et déplace le second demi-coin. Le dispositif de commande commande indépendamment les premier et second moteurs pour déplacer les premier et second demi-coins.

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Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate