

Title (en)

Separation device of dust from pieces of yarn for the collection and recovery of winding waste and winding machine with such device

Title (de)

Vorrichtung zur Staubtrennung von Garnstücken zur Sammlung und Wiedergewinnung von Wickelabfall sowie Wickelmaschine mit solch einer Vorrichtung

Title (fr)

Dispositif de séparation de poussière à partir de morceaux de fil pour la collecte et la récupération de déchets d'enroulement et machine d'enroulement avec un tel dispositif

Publication

EP 2653423 B1 20150715 (EN)

Application

EP 13164052 A 20130417

Priority

IT MI20120638 A 20120418

Abstract (en)

[origin: EP2653423A1] A winding machine of the type comprising a plurality of winding units (23) and at least one aspirator (22) able to intake impurities and hair of the yarn, that is the dusts, or pieces of yarn deriving from the restoration and junction interventions of the yarn, said at least one aspirator (22) being connected through a common duct (70) to a common multi-cyclone type general filter (80) for collecting the winding waste, comprising in series and in depression with an aspirator (71), a double cyclone device (81) for separating the pieces of yarn from the dusts and a filter device of said dusts exiting from said double cyclone device, characterized in that said double cyclone device (81) of the pieces of yarn from the dusts comprises an annular central portion (84) and two frustum-conical portions (82A, 82B) respectively lower and upper arranged at the opposite sides of said annular portion (84) for generating two cyclones respectively of the pieces of yarn and of the dusts and for conveying the same from said central portion (84) to the reduced-diameter mouths (86, 89) of said two frustum-conical portions (82A, 82B), wherein said double cyclone device comprises primary nozzles (88) for injecting tangential flows of compressed air into said double cyclone device (81).

IPC 8 full level

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CPC (source: EP)

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Citation (examination)

EP 2508659 A1 20121010 - SAVIO MACCHINE TESSILI SPA [IT]

Cited by

CN109552934A; CN105984751A; CN111776863A; CN110431098A; EP2924154A1; EP4345199A1; WO2018235617A1; EP3167950B1

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